

Cornell University Library  
Ithaca, New York

BOUGHT WITH THE INCOME OF THE  
SAGE ENDOWMENT FUND  
THE GIFT OF  
HENRY W. SAGE

1891

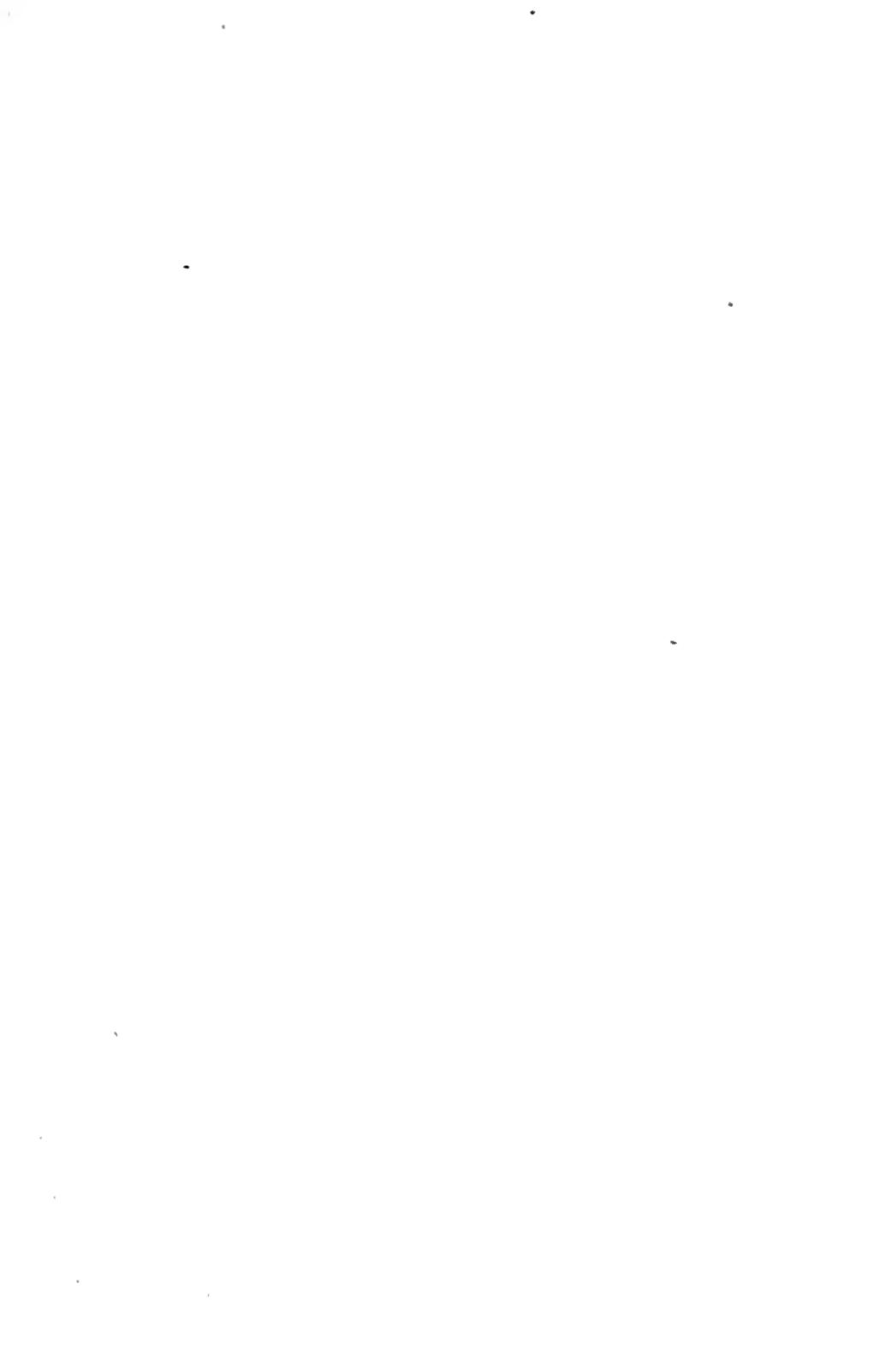
Cornell University Library  
Z 7164.L8S84

A bibliography of municipal utility regu



3 1924 021 159 268

01n 01n 01n 0



**HARVARD BUSINESS STUDIES**  
**VOLUME IV**

HARVARD BUSINESS STUDIES

D776  
49  
726

- I. SCIENTIFIC MANAGEMENT  
Edited by C. B. Thompson. \$4.00 *net.*
- II. AN APPROACH TO BUSINESS PROBLEMS  
By A. W. Shaw. \$2.00 *net.*
- III. BUSINESS STATISTICS  
Edited by M. T. Copeland. \$3.75 *net.*
- IV. BIBLIOGRAPHY OF MUNICIPAL UTILITY  
REGULATION AND MUNICIPAL OWNERSHIP  
By D. L. Stevens. \$4.00 *net.*

HARVARD UNIVERSITY PRESS  
CAMBRIDGE, MASS., U. S. A.

# A Bibliography of Municipal Utility Regulation and Municipal Ownership

BY

DON LORENZO STEVENS, M.B.A.



CAMBRIDGE  
HARVARD UNIVERSITY PRESS  
LONDON: HUMPHREY MILFORD  
OXFORD UNIVERSITY PRESS  
1918  
EL

COPYRIGHT, 1918  
HARVARD UNIVERSITY PRESS

TO  
MY FATHER  
WHOSE INTEREST AND ENCOURAGEMENT  
HAVE MADE THIS WORK POSSIBLE



# Cornell University Library

The original of this book is in  
the Cornell University Library.

There are no known copyright restrictions in  
the United States on the use of the text.

## PREFACE

AN extensive bibliography intended primarily for the use of business men may appear somewhat novel. Yet the recent great increase in the number of special libraries is an indication of the widespread need for ready access to business literature. In the field of public utility regulation and municipal ownership the amount of material is so vast that few can keep pace with it. To provide a classified and critical index for the use of utility managers, commissioners, lawyers and all others interested in public utilities is the purpose of this work.

In making a choice of material to be included and the form of presentation, the decision has been based upon the needs of the busy man of affairs. That the expert and the general reader alike may be served, all readily accessible books and signed articles, of more than transitory interest, have been listed. Free use of annotations, together with a detailed subject classification, will serve to guide the reader to the works best suited to his needs. Official publications are included only if especially valuable, but references to other sources of information are given in the list of bibliographies. Works in other languages than English are omitted. Electric, gas, water and traction utilities are covered, and it is believed that little of value on the subjects treated has been overlooked. Owing to the rapid changes in the methods of regulation during the last decade, nearly all of the recent but only the best of the earlier material is included. The work has been brought down to January 1, 1917.

As no one person could pass expert judgment on so many subjects, the critical annotations are intended to indicate *relative* value only. Not all people will agree with the author's comments on the various works, but the annotations are only intended to facilitate a selection of material. The title and annotations, together with the subject classification, indicate quite closely the nature of each book and article. "Elementary" and "techni-

cal " are used in the ordinary sense. " Popular," however, indicates that the article is elementary, rather wordy and of relatively little interest. " Brief " refers both to actual length and to the amount of information conveyed. Where the writer's conclusions are of interest in determining the choice of material, these also are briefly indicated.

In the course of preparation of the author's forthcoming book on *The Regulation of Municipal Utilities*, a broad survey of the published material on the subject was undertaken. The vast amount, and the difficulty of selecting the best soon became apparent. Public utility operators, commissioners, librarians and others with whom he came in contact, almost without exception, expressed the need for a comprehensive guide to the literature and urged him to undertake its compilation. As a consequence practically all of the author's free time during the past two years, together with the time of several assistants, has been devoted to the work. The titles listed in this volume comprise less than one-third of the material collected. The publishing of the remainder for the sake of completeness was thought inadvisable, since all of the better works have been included. In conclusion, let it be stated that the author has personally read every work listed herein, and that the annotations are based solely upon his judgment. Despite the resulting inevitable defects, it is hoped that the volume will prove of considerable assistance to all persons studying the subjects of municipal utility regulation and municipal ownership.

D. L. S.

# CONTENTS

	PAGE
PREFACE . . . . .	v
I. GENERAL WORKS . . . . .	3-21
Books, 3; Articles, 9; Bibliographies, 17.	
II. HISTORY OF UTILITIES AND OF REGULATION . . . . .	22-126
United States and Foreign, 22; United States—General, 28; Alabama, 47; California, 47; Colorado, 51; Connecticut, 51; District of Columbia, 52; Florida, 52; Georgia, 52; Idaho, 53; Illinois, 53; Indiana, 60; Iowa, 61; Kansas, 63; Kentucky, 63; Louisiana, 63; Maryland, 64; Massachusetts, 65; Michigan, 71; Minnesota, 74; Missouri, 76; Nebraska, 77; New Jersey, 78; New York, 78; Ohio, 87; Oklahoma, 93; Oregon, 93; Pennsylvania, 93; Rhode Island, 97; South Dakota, 97; Tennessee, 97; Texas, 97; Vermont, 98; Virginia, 99; Washington, 99; West Virginia, 101; Wisconsin, 101; Austria, 109; Belgium, 109; Can- ada, 109; France, 112; Germany, 113; Great Britain, 114; Italy, 125; Japan, 126; Spain, 126; Sweden, 126; Switzerland, 126.	
III. FRANCHISES . . . . .	127-146
General Works, 127. History: United States and Foreign, 132; United States—Gen- eral, 132; California, 134; Colorado, 134; Illinois, 135; Indiana, 137; Iowa, 137; Massachusetts, 137; Michigan, 138; Minnesota, 138; Missouri, 139; New York, 139; Ohio, 141; Pennsylvania, 143; Wisconsin, 143; Canada, 144; France, 144. Length of Term, 144.	
IV. PUBLIC SERVICE COMMISSIONS . . . . .	147-195
General Works, 147. History: Commissions in General, 153; California, 158; Colo- rado, 160; Illinois, 160; Indiana, 161; Iowa, 161; Massachu- sets, 162; Minnesota, 163; Missouri, 163; New Jersey, 163; New York, 163; Ohio, 167; Oklahoma, 167; Pennsylvania, 167; Texas, 168; Vermont, 168; Virginia, 168; Washington, 168; West Virginia, 168; Wisconsin, 169. State vs. Local Regulation, 174. Uniform Accounting, 178. Service Regulation, 184. Control of Capitalization, 189. Judicial Review of Regulation: General works, 192; History, 194.	

<b>V. VALUATION . . . . .</b>	<b>196-254</b>
General Works: Books, 196; Articles, 201.	
History: United States — General, 211; California, 212; Illinois, 212; Iowa, 212; Michigan, 212; Missouri, 213; Nebraska, 213; New Jersey, 213; New York, 213; Ohio, 213; Oregon, 214; Texas, 214; Washington, 214; Wisconsin, 214.	
Theories and Methods, 215.	
Inventories, 220.	
Intangibles, 224.	
Franchise Value, 231.	
Land Value, 233.	
Depreciation, 234.	
Value for Condemnation and Purchase, 248.	
Court and Commission Attitude, 249.	
<b>VI. RATES . . . . .</b>	<b>255-299</b>
History: United States and Foreign, 255; United States — General, 255; California, 258; Georgia, 259; Idaho, 259; Illinois, 259; Iowa, 260; Louisiana, 260; Maryland, 260; Massachusetts, 260; Michigan, 261; Minnesota, 262; Missouri, 262; New York, 262; Ohio, 263; Oregon, 263; Pennsylvania, 263; Texas, 264; Vermont, 264; Washington, 264; Wisconsin, 264; Canada, 266; France, 266; Germany, 266; Great Britain, 266; Italy, 267.	
Rate Schedules: General Works, 267; Electric, 271; Gas, 284; Traction, 286; Water, 290.	
Rate of Return, 293.	
The Sliding Scale, 297.	
<b>VII. TAXATION . . . . .</b>	<b>300-307</b>
<b>VIII. HOLDING COMPANIES . . . . .</b>	<b>308</b>
<b>IX. MUNICIPAL OWNERSHIP . . . . .</b>	<b>309-378</b>
General Works: Books, 309; Articles, 311.	
In Favor, 319.	
Opposed, 326.	
History: United States and Foreign, 333; United States — General, 337; Alabama, 343; California, 343; Connecticut, 345; Florida, 345; Georgia, 346; Idaho, 346; Illinois, 346; Indiana, 349; Iowa, 349; Kansas, 350; Kentucky, 350; Louisiana, 350; Massachusetts, 351; Michigan, 352; Minnesota, 354; Missouri, 354; Nebraska, 354; New York, 355; Ohio, 356; Oklahoma, 358; Oregon, 358; Pennsylvania, 358; South Dakota, 360; Tennessee, 360; Texas, 360; Vermont, 360; Virginia, 361; Washington, 361; West Virginia, 362; Wisconsin, 362; Austria, 363; Belgium, 363; Canada, 363; France, 365; Germany, 366; Great Britain, 367; Italy, 377; Japan, 377; Sweden, 377; Switzerland, 377.	
Regulation of Municipal Plants, 378.	
<b>INDEX . . . . .</b>	<b>379-410</b>

BIBLIOGRAPHY OF MUNICIPAL  
UTILITIES



# BIBLIOGRAPHY OF MUNICIPAL UTILITIES

## I. GENERAL WORKS

### BOOKS

American Academy of Political and Social Science. Control of municipal public service corporations. *Annals of the American Academy of Political and Social Science*, xxxi, no. 3 (1908). 201 pp.

An excellent symposium on the utility problems in various American cities. For list of articles see p. 29.

— Electric railway transportation. *Annals of the American Academy of Political and Social Science*, xxxvii, no. 1 (1907). 203 pp.

The urban transportation problem: a general discussion. B. J. Arnold. The decreasing financial return upon urban street railway properties. Thomas Conway.

The depreciation problem. W. B. Jackson.

Methods of increasing the efficiency of surface lines in large cities. Williston Fish.

The investigation of traffic possibilities of proposed subway lines. W. S. Twining.

Possibilities of freight traffic on interurban lines. F. S. Cummins.

Express business on interurban lines. A. Eastman.

Economic factors in the selection of cars for urban service. S. M. Curwen.

The relations of the electric railway company with its employees. C. D. Emmons.

The strike problem upon electric railways. D. T. Pierce.

Educating the public to a proper appreciation of urban street railway problems. A. W. Warnock.

The presentation of interurban problems to the public. A. D. B. Van Zandt.

Valuation of intangible street railway property. F. R. Ford.

The indeterminate permit as a satisfactory franchise. W. O. Morgan.

State supervision of electric railways in Wisconsin. B. H. Meyer.

The fruits of public regulation in New York. M. R. Maltbie.

Supervising engineers and street railway service. George Weston.

Industrial arbitration in Australia. P. S. Eldershaw.

American Academy of Political and Social Science. Public policies as to municipal utilities. *Annals of the American Academy of Political and Social Science*, lvii (1915). 357 pp.

Fundamental planks in a public utility program. D. F. Wilcox.

The regulation of municipal utilities. N. T. Guernsey.

Philadelphia's transit problem. A. M. Taylor.

Municipal lighting rates. Ray Palmer.

Interlocking directorates. L. D. Brandeis.

The regulation of public utilities. C. H. Harrison.

Some present day issues of public utility regulation. E. W. Bemis.

What certain cities have accomplished without state regulation. S. P. Jones.

A constructive policy for public service corporations. Charles Day.

What regulation must accomplish if it is to be permanent. J. M. Eshelman.

The advantages of state regulation. Halford Erickson.

The distribution of functions between local and state regulation. M. R. Maltbie.

The case for home rule. C. E. Merriam.

State and local regulation in Pennsylvania. I. W. Stratton.

Municipal ownership. N. D. Baker.

Municipal ownership: the testimony of foreign experience. F. C. Howe.

Pasadena's municipal light and power plant. C. W. Koiner.

South Norwalk's municipal electric works. A. E. Winchester.

The hydro-electric system in Toronto. H. C. Hocken.

Some limitations and objections to municipal ownership. C. M. Rosencrantz.

Municipal ownership and operation of water works. M. N. Baker.

Why I believe in municipal ownership. Robert Crosser.

The utilities bureau. Felix Frankfurter.

Holding companies and the public welfare. C. F. Mathewson.

Public advantages of holding companies. F. T. Homer.

The public welfare and the holding company. J. P. Goodrich.

Proceedings of the Conference of American mayors.

Excellent symposium; from the public's point of view.

---

— State regulation of public utilities. *Annals of the American Academy of Political and Social Science*, liii (1914). 317 pp.

Commission regulation of public utilities: a survey of legislation. I. L. Sharfman.

The qualifications needed for public utility commissioners. W. D. Kerr.

The public service company law of Pennsylvania. C. W. M. Trinkle.

Some defects in the present Pennsylvania statute on public utilities.  
C. E. Bown.

Methods of judicial review in relation to effectiveness in commission control.  
O. L. Pond.

Lower telephone rates for New York City.  
E. H. Outerbridge.

Effects of state regulation upon the municipal ownership movement.  
D. F. Wilcox.

Effect of state regulation upon municipal home rule.  
J. A. Smith.

State *vs.* local regulation.  
S. P. Jones.

Public utility regulation by Los Angeles.  
C. K. Mohler.

Governmental regulation of accounting procedure.  
L. G. Powers.

Accounting in public service regulation.  
F. W. Stevens.

Effects of the indeterminate franchise under state regulation.  
W. J. Norton.

Should the public utilities commission have power to control the issuance of securities.  
J. M. Eshelman.

Texas stock and bond law.  
C. S. Potts.

Rate of return.  
J. E. Allison.

Capitalization of earnings of public service companies.  
Morris Schaff.

Certain principles of valuation in rate cases.  
R. H. Whitten.

Depreciation.  
J. E. Allison.

Non-physical or going concern values.  
H. P. Gillette.

Recent tendencies in valuations for rate making purposes.  
Edwin Gruhl.

Electric lighting and power rates.  
Halford Erickson.

Elements to be considered in fixing water rates.  
G. W. Fuller.

Regulating the quality of public utility service.  
J. N. Cadby.

Service regulations for gas.  
R. H. Fernald.

Some notes on the regulation of gas service.  
J. C. Dickerman.

Service regulations for electrical utilities.  
L. H. Harris.

Ten rules for service.  
P. A. Sinsheimer.

An excellent symposium on all phases of the problem.

CURTIS, W. J. Local public utilities. Cambridge ? 1911. 29 + 21 pp.

DOWNEY, E. H. Regulation of urban utilities in Iowa. Iowa City, 1912. 174 pp.

Iowa applied history series, i, no. 3.

Ch. i. The need of regulating urban utilities.

ii. The failure of local regulation.

iii. The appropriate organ of state regulation.

iv. Public service commissions in the United States.

v. Urban utility regulation in Iowa.

vi. Suggestions for effective utility regulation.

An excellent, thoroughly annotated study of the principles of regulation, regulation in the United States and Iowa's experience.

FOOTE, A. R. *Municipal public service industries.* Chicago, 1899. 337 pp.

Part I. How should the franchise question be settled?

II. Powers of municipalities.

III. Cost of service to users and tax payers.

HOLMES, F. L. *Regulation of railroads and public utilities in Wisconsin.* New York, 1915. 375 pp.

Discusses the work of the Wisconsin commission only, but serves as a very good elementary work on all phases of public utility regulation. For list of chapters, see p. 104.

KING, C. L. *The regulation of municipal utilities.* New York, 1912. 404 pp.

Need for regulation. C. L. King.

Municipal ownership *vs.* adequate regulation. C. L. King.

The Minneapolis gas settlement: a typical struggle for a city's rights. S. P. Jones.

Franchise essentials. C. L. King.

The sliding scale method of regulation as applied to gas companies in Massachusetts. E. N. Wrightington.

Is a rational basis possible for telephone rates? D. C. Jackson.

A rapid transit policy for greater New York. M. R. Maltbie.

Elements of a constructive franchise policy. D. F. Wilcox.

Suggestions for a model street railway franchise. D. F. Wilcox and J. W. S. Peters.

The need for public utility commissions. C. L. King.

The board of public utilities of Los Angeles. L. R. Works.

The utilities commission of Kansas City, Missouri. J. A. Harzfeld.

The St. Louis public service commission. R. N. Baldwin.

State *vs.* municipal utility commissions. C. L. King.

Uniform accounting: its needs and results. E. K. Gruhl.

The public utilities commission of Massachusetts. J. B. Eastman.

The Wisconsin public utilities commission. B. H. Meyer.

The public utility law of New York. T. M. Osborne.

The New York public service commission for the second district. G. R. Grant.

The work of the public service commission for the first district, New York. R. H. Whitten.

A selected bibliography. C. L. King.

An excellent elementary textbook. Many of the chapters are revised reprints from the Proc., National Conference for Good City Government.

LINDSLEY, VAN SINDEREN. Rate regulation of gas and electric lighting. New York, 1906. 165 pp.

"The object of this little book is to set forth, as concisely as the scope of the subject will permit, the legislative acts and decided cases in the several states affecting the business of supplying gas and electric light."

An excellent study.

McLAUGHLIN, A. C., and HART, A. B. Cyclopedias of American government. New York, 1914. 3 vols.

Contains short, signed articles, each followed by references to authorities. The best articles on municipal utility regulation are the following:

Commissions in American government. C. A. Beard, i, 350-354.

Financial aspects of corporation franchises. E. S. Mead, ii, 44.

Legal aspects of corporation franchises. D. R. Dewey, ii, 45-48.

Public regulation of gas lighting. C. L. King, ii, 71.

Holding companies. E. S. Mead, ii, 124.

Electric lighting. T. C. Martin, ii, 354-355.

Municipal ownership. M. R. Maltbie, ii, 486-487.

Public service commissions. M. R. Maltbie, iii, 108-110.

Public service corporations. M. R. Maltbie, iii, 110-112.

State railroad commissions. H. M. Bowman, iii, 134-135.

Electric railroads. T. C. Martin, iii, 138-140.

Problems of transit in cities. D. F. Wilcox, iii, 549-552.

Valuation of public utilities. R. H. Whitten, iii, 606.

MATTHEWS, NATHAN. Municipal charters: a discussion of the essentials of a city charter with forms or models for adoption. Cambridge, 1914. 210 pp.

Ch. v. Relations with public service corporations.

xi. Administrative provisions: the management of water, gas and similar municipal enterprises.

A good discussion of the provisions that should be included in a city charter.

ROEMER, J. H. Some features of state regulation of public utilities. Madison, 1909. 25 pp.

A very general article on regulation and the work of the Wisconsin commission.

ROWE, L. S. Problems of city government. New York, 1908. 358 pp.

Ch. x. The relation of the city to public utilities.

xi. The municipality and the gas supply as illustrated by the experience of Philadelphia.

- xii. Fundamental principles involved in municipal ownership.
- xiii. Municipal ownership and operation of street railways in Germany.
- xiv. Municipal ownership and operation: the value of foreign experience.

A very good elementary textbook, with references.

**SHARFMAN, I. L.** *Railway regulation: an analysis of the underlying problems in railway economics from the standpoint of government regulation.* Chicago, 1915. 230 pp.

- Ch. i. The extent and importance of railway transportation.
- ii. The problem of regulation.
- iii. American railway development.
- iv. Railway competition.
- v. The theory and practice of rate making.
- vi. Regulation of railway rates.
- vii. Railway discrimination.
- viii. Regulation by the states.
- ix. The conflict between state and federal authority.
- x. Federal regulation.

An excellent elementary work, treating of railroads only, but containing chapters of interest for all public utilities.

**WYER, S. S.** *Regulation, valuation and depreciation of public utilities.* Columbus, 1913. 313 pp.

- Ch. i. The public and the public utility.
- ii. Fundamental definitions.
- iii. Economics of utility problems.
- iv. Governmental power to regulate utilities.
- v. Protection of utilities from adverse regulation.
- vi. Requirements of regulation.
- vii. Relief from oppressive regulation.
- viii. Depreciation.
- ix. Electrolysis as a form of depreciation.
- x. Legal status of electrolysis.
- xi. Valuation.
- xii. Going value and going concern value of utilities.
- xiii. Principles governing cost of utility service.
- xiv. Engineering data pertaining to utility regulation, valuation and depreciation problems.
- xv. Reference data.
- xvi. Selected bibliography.

An excellent and comprehensive work, composed mainly of classified quotations from books, articles and cases on the subjects discussed. Not very readable, but contains much of interest for both layman and expert.

Y. M. C. A., New York, West Side Branch. Public utility economics. New York, 1914. 195 pp.

Magnitude of the electric light, power and transportation business.  
T. C. Martin.

The public, the investor and the holding company. F. T. Homer.

Municipal ownership of public utilities. Arthur Williams.

Progress of the science of lighting. E. P. Hyde.

Telephones at home and abroad. T. P. Sylvan.

Future of public utilities. T. N. McCarter.

Centralization of power supply. Samuel Insull.

Investments in public utilities and how held. W. H. Gardiner.

Future regulation of public utilities. W. D. Kerr.

Some legal aspects of regulation of public service corporations. C. F. Mathewson.

Papers before the "Finance forum" of the association. A good, elementary symposium on various regulation problems.

#### ARTICLES

**ABELL, H. C.** Difficult problems which public utility commissions are endeavoring to solve. *Journal of Electricity, Power and Gas*, xxii, 81-84 (1909).

A very good, concise analysis of the elements of value, rate of return, service standards and efficiency rewards.

— — — American Gas Light Journal, xc, 1120-1122, 1164-1165 (1909).

**ALMERT, HAROLD.** Public utility regulation from the standpoint of the public and the engineer. *Journal of the Western Society of Engineers*, xix, 516-522 (1914).

Discussion: pp. 522-540.

**BAKER, C. W.** What shall we do with municipal monopolies? (*In Monopolies and the people*. 3d edition. New York, 1899.) 333-346.

A brief discussion of the need for regulation and the right to regulate.

**BAUER, JOHN.** The control of return on public utility investments. *Political Science Quarterly*, xxxi, 260-288 (1916).

Purpose: "to point out the fundamental difficulties in present procedure and to suggest how they may be reasonably overcome." Excellent.

BAUM, F. G. The best control of public utilities. *Trans., American Institute of Electrical Engineers*, xxxiv, 145-167 (1915).

The writer advocates class rates to avoid the appearance of discrimination, and a liberal rate of return to secure extensions. Includes charts and formulae; non-technical.

— — — Stone and Webster Public Service Journal, xvi, 100-110 (1915).

Abstract.

BEMIS, E. W. Some present-day issues of public utility regulation. *Annals of the American Academy of Political and Social Science*, lvii, 62-71 (1915).

A popular discussion of commission regulation, from the public's point of view.

BUSBY, L. A. Regulation of public utilities. *Journal of the Western Society of Engineers*, xxi, 33-51 (1916).

Discussion: pp. 51-54. A very popular article, of interest chiefly for its discussion of requirements for success in commission regulation.

— — — *Aera*, iv, 515-533 (1916).

Reprint.

— — — *Electric Railway Journal*, xlvi, 1081-1084 (1915).

Abstract.

CAHOON, J. B. State control of corporations. *Municipal Affairs*, iv, 520-525 (1900).

A brief outline of the desirable form of regulation, interesting because of advocating methods substantially the same as those now in use.

CROSBY, O. T. Public policies and public utilities. *Aera*, i, 87-99 (1912).

On six possible relationships between the company and the public.

DAY, CHARLES. A constructive policy for public service corporations. *Annals of the American Academy of Political and Social Science*, lvii, 83-93 (1915).

Good outline of policies for utility management. Somewhat elementary.

DOUGLASS, S. M. Regulation and the public. *Progressive Age*, xxx, 783-786 (1912).

Popular and rather general.

DUFFY, C. N. Electric utilities. *Public Service*, xii, 47-52, 89-94 (1912).  
A popular, general discussion of utility problems, with statistics.

— — — Electric Railway Journal, xxxix, 103-105 (1912).  
The same, slightly condensed.

ERICKSON, HALFORD. The advantages of state regulation.  
*Annals of the American Academy of Political and Social Science*, lvii, 123-162 (1915).  
Excellent general article on commission regulation and its problems.

— — — The regulation of public utilities in Wisconsin. *Journal of the Western Society of Engineers*, xviii, 398-422 (1913).  
Discussion: pp. 423-440. A good elementary paper on commission regulation in the form of a description of the work of the Wisconsin commission.

— — — *Public Service*, xiv, 135-138, 179-181 (1913).  
Abstract.

— — — Regulation of utilities by commission. *Railway Age Gazette*, liv, 755-759 (1913).  
Abstract.

ESHLEMAN, J. M. Regulation fundamentals. *Public Service Regulation*, ii, 684-685 (1913).  
Elementary.

— — — What regulation must accomplish if it is to be permanent. *Annals of the American Academy of Political and Social Science*, lvii, 94-110 (1915).  
Excellent general discussion.

FOOTE, A. R. Municipal ownership problem solved. *Moody's Magazine*, iii, 720-726 (1907).  
Popular discussion of regulation, which is stated to be the solution of the municipal ownership problem.

FORREST, J. D. A new plan for the control of quasi-public works. *American Journal of Sociology*, iii, 837-847 (1898).  
Discussion of the plan of A. F. Potts for a gas trust managed in the interest of the public. Reviews the history of its application in Indianapolis.

GALLOWAY, J. D. Is utility regulation on the right basis? *Engineering Record*, lxxiv, 561-563 (1916).  
Favors competition instead of regulated monopoly.

GANDOLFO, J. H. The valuation of public utility property. *Trans., American Society of Civil Engineers*, lxxix, 842-878 (1915).  
Discussion: pp. 879-918. Considers the historical development of the utility business and of the right to regulate.

GRAHAM, D. A. The application of theories of public regulation to the management of utilities. *Journal of the American Waterworks Association*, ii, 324-343 (1915).  
Good; elementary.

GRAY, J. H. Public service commissions. *Proc., American Political Science Association*, iv, 324-335 (1907).  
A discussion of papers by W. H. Hatton and T. M. Osborne.

HARRISON, C. H. The regulation of public utilities. *Annals of the American Academy of Political and Social Science*, lvii, 54-61 (1915).  
Elementary discussion, including the need for regulation, the advantages of local regulation and of municipal ownership.

HATTON, W. H. Public service commissions. *Proc., American Political Science Association*, iv, 305-315 (1907).  
Discussion: pp. 324-335. A good, brief statement of some of the fundamental principles of public utility regulation.

— — — Publications, *American Economic Association*, 3d series, ix, 263-278 (1908).  
Discussion: pp. 279-309.

JACKSON, D. C. Equitable rate making by public service companies. *Technology Quarterly*, xxi, 338-359 (1908).  
A good discussion of general principles underlying regulation for rate making purposes.

— — — Stone and Webster Public Service Journal, v, 104-126 (1909).  
Reprint.

— — — Equitable rates for public service. *Public Service*, vii, 145-149, 189-192 (1909).  
Reprint.

JOHNSON, E. R. Public regulation of street railway transportation. *Annals of the American Academy of Political and Social Science*, xxix, 275-291 (1907).

Gives a brief résumé of the regulation in various countries, states and cities. The discussion includes general conclusions for the United States.

KEALY, P. J. Municipal coöperation in public utility management. *Trans., American Institute of Electrical Engineers*, xxxiv, 2533-2544 (1915).

Discussion: pp. 2545-2548. A general historical account of the various methods used in dealing with public utilities and of public attitude.

KERR, W. D. Future regulation of public utilities. (*In* Y. M. C. A., New York, West Side Branch. *Public utility economics*. New York, 1914.) 141-161.

An elementary discussion of regulation problems and methods.

KIERSTED, WYNKOOP. Influence of state regulation upon economy and efficiency in the operation of waterworks properties. *Engineering and Contracting*, xli, 239-241 (1914).

KING, C. L. The need for public utility commissions. (*In* *The regulation of municipal utilities*. New York, 1912.) 185-207.

A good elementary discussion of the various possible methods of public utility regulation, the conclusion being in favor of commissions.

— The need for regulation. (*In* *The regulation of municipal utilities*. New York, 1912.) 3-22.

Good; elementary.

— Public regulation of gas lighting. (*In* McLAUGHLIN, A. C., and HART, A. B. *Cyclopedia of American government*. New York, 1914.) ii, 71.

KNOWLES, MORRIS. State regulation of public utilities. *Journal of the New England Waterworks Association*, xxvi, 272-283 (1912).

Discussion: pp. 283-286. A good elementary discussion of the general principles of regulation.

LEWIS, C. T. How should public service corporations be controlled? *Municipal Affairs*, vi, 738-748 (1903).

General and elementary.

MALTBIE, M. R. Public service corporations. (*In McLAUGHLIN, A. C., and HART, A. B. Cyclopedie of American government. New York, 1914.*) iii, 110-112.

MARTIN, T. C. Electric lighting. (*In McLAUGHLIN, A. C., and HART, A. B. Cyclopedie of American government. New York, 1914.*) ii, 354-355.

MATHEWSON, C. F. Some legal aspects of regulation of public service corporations. (*In Y. M. C. A., New York, West Side Branch. Public utility economics. New York, 1914.*) 163-195.  
A good but very popular discussion of legal problems of regulation, including the right to regulate and valuation.

MEYER, B. H. Central utilities commissions and home rule. *American Political Science Review*, v, 374-393 (1911).  
Includes a good popular discussion of the general principles of regulation.

MILLER, A. S. Public service commissions. *Proc., American Gas Institute*, vii, 713-720 (1912).  
Discussion: pp. 720-730. Elementary; on the relations of public utilities and the public, and regulation in general.

MONTGOMERY, H. E. Government ownership unnecessary. *Moody's Magazine*, iv, 143-145 (1907).  
Outlines of a suggested plan for regulating all public service corporations through state corporation departments and a graduated tax on net profits.

MORTIMER, J. D. Is regulation by commission a permanent part of our economic scheme? *Electric Railway Journal*, xliii, 21-22 (1914).

NASH, L. R. Commission regulation of business with particular reference to public utilities. *Stone and Webster Public Service Journal*, xvi, 11-26 (1915).  
A rather general and elementary discussion of regulation.

NORMAN, O. E. Factors involved in establishing service, charge and rate of return of public utilities. *American Gas Light Journal*, cii, 263, 267-269 (1915).  
Abstract. Very general; elementary.

PARSONS, FRANK. The legal aspects of monopoly. (*In BEMIS, E. W. Municipal monopolies.* 4th edition. New York, 1904.) 425-501.

A good, annotated discussion of the right of cities to engage in business, to compete with private plants, to take property by condemnation, to prevent the use of injurious business methods, and to regulate rates and service.

POLLOCK, H. M., and MORGAN, W. S. The control of municipal public service corporations. (*In Modern cities.* New York, 1913.) 225-249.

A popular discussion of corruption due to public utilities and of the various methods of regulation.

ROEMER, J. H. Commission control of public utilities. *Electrical World*, lxii, 531-533 (1913).

A good elementary article on regulation in general.

— Regulation of public utilities. *Public Service*, vii, 149-152 (1909).

— — — *Public Service Regulation*, i, 511-516 (1912).

A good elementary account of commission regulation.

ROWE, L. S. The relation of the city to public utilities. (*In Problems of city government.* New York, 1908.) 208-240.

A good elementary discussion, including an historical comparison of municipal and private plants, and tables of statistics.

ROYCE, F. P. The business of local public service companies and their relations to the public. *Stone and Webster Public Service Journal*, vii, 16-29 (1910).

A good elementary article on regulation in general and its historical development.

— — — *Public Service*, ix, 43-44 (1910).

Reprint.

— Commission control of public service corporations. *Journal of Electricity, Power and Gas*, xxv, 54-57 (1910).

For a longer abstract of the same paper, see his "The business of local public service companies and their relations to the public."

— Present day regulation. *Stone and Webster Public Service Journal*, xii, 236-243 (1913).

A brief and elementary article on regulation in general and its historical development.

SHARFMAN, I. L. The problem of regulation. (*In* Railway regulation. Chicago, 1915.) 10-28.

An elementary account of the basis—legal, economic and historical—of utility regulation.

SINSHEIMER, P. A. Ten rules for service: principles applied by the railroad commission of California to the regulation of public utility service. *Annals of the American Academy of Political and Social Science*, liii, 292-306 (1914).

A good elementary summary of the principles underlying satisfactory regulation.

SPEIRS, F. W. Regulation of cost and quality of service as illustrated by street railway companies. *Annals of the American Academy of Political and Social Science*, 1900: supplement, 63-76.

Brief and very general discussion of traction franchises and their provisions, and of commission control.

TAUSSIG, F. W. Public ownership and public control. (*In* Principles of Economics. New York, 1913.) 397-418.

Elementary; very good.

WAGNER, H. A. Public service and the consumer. *Electrical World*, lxviii, 7-9 (1916).

WHITFIELD, J. B. Public utility corporations in general. *American Law Review*, xli, 870-891 (1907).

A very good, non-technical summary of the rights, duties and privileges of public utility corporations.

— Rights and duties of public service corporations. *Yale Law Journal*, xxii, 39-47 (1912).

WILCOX, D. F. Fundamental planks in a public utility program. *Annals of the American Academy of Political and Social Science*, lvii, 8-19 (1915).

Excellent general discussion. Maintains that the public should guarantee the investment; that public utilities should not be sources of municipal profit; and that preparation should be made for ultimate ownership.

— — — *American City*, xi, 480-485 (1914).

Abstract.

WILCOX, D. F. Problems of transit in cities. (*In McLAUGHLIN, A. C., and HART, A. B. Cyclopedie of American government. New York, 1914.*) iii, 549-552.

WILLIS, H. E. The proper relation between public callings and the state: governmental regulation and how it can be accomplished. *Proc., Minnesota Academy of Social Science*, v, 165-179 (1911).

A general discussion of whether *laissez-faire*, enforced competition or governmental regulation is desirable for "trusts" and public service companies.

WYER, S. S. Governmental power to regulate. (*In Regulation, valuation, and depreciation of public utilities. Columbus, 1913.*) 67-77.

Composed largely of classified quotations from books, articles and cases.

— Rate regulation of electric power. *Cassier's Magazine*, xxxv, 402-415 (1909).

A digest of the Columbus railway and light company case. Interesting as a general discussion of valuation and rate regulation.

WYMAN, BRUCE. State control of public utilities. *Harvard Law Review*, xxiv, 624-634 (1911).

"In large part the preface to Wyman on public service corporations." An excellent article on the history of regulation, the right to regulate and the duties and privileges of public service corporations.

#### BIBLIOGRAPHIES

American Society of Civil Engineers. Bibliography on valuation of public utilities. New York, 1915. 133 pp.

Part I. Reprinted from *Trans., American society of civil engineers*, lxxvi, 2133-2193 (1913). Brought up to July 16, 1913.

II. Prepared for the American electric railway association. Supplementary and brought up to December 23, 1915.

BOWKER, R. R. State publications: a provisional list of the official publications of the several states of the United States from their organization. New York, 1899-1908. 1031 pp.

Brooklyn Public Library. Books on municipal ownership. Brooklyn, 1906. 27 pp.

Bureau of Railway Economics. List of references on valuation of railways. Washington, 1916. 130 pp.

— Railway economics: a collective catalogue of books in fourteen American libraries. Chicago, 1912. 446 pp.  
An excellent classified catalogue of works pertaining to railroads.

CONAT, M. L. A list of periodical publications relating to municipal affairs. Special Libraries, vi, 129-139 (1915).

Detroit Public Library. Municipal affairs: books and articles in the Detroit public library. Detroit, 1902. 44 pp.

DOHERTY, H. L. Rates. Proc., National Commercial Gas Association, 1910: 297-318.  
Bibliography of gas and electric rates: pp. 308-318.

Engineering Index, New York, vol. i, 1884-1891-vol. iv, 1901-1905; continued as the Engineering Index Annual.

Engineering Index Annual, New York, vol. i, 1906; annual.  
Compiled from the Engineering Index published monthly in the Engineering Magazine.  
A descriptive list of current engineering literature, classified by subjects.

FOSTER, H. A. Engineering valuation of public utilities and factories. New York, 1912. 345 pp.  
Bibliography: pp. 330-332.

GATES, A. J. Catalogue of technical periodicals: libraries in the city of New York and vicinity. New York, 1915. 110 pp.  
"Library of the Engineering societies, Bibliographical contributions no. 1."

HASSE, A. R. Index of economic material in documents of the states of the United States: prepared for the Department of economics and sociology of the Carnegie institution of Washington. Washington, 1907-.  
A volume is being issued for each state. Twelve volumes are now ready.

Industrial Arts Index, New York, 1913-; monthly, with annual cumulations.  
A subject index to a selected list of engineering and trade periodicals.

METCALF, LEONARD. Waterworks valuation and fair rates in the light of the Maine supreme court decisions in the Waterville and Brunswick cases. Trans., American Society of Civil Engineers, lxiv, 1-74 (1909).  
Bibliography of waterworks valuation: pp. 69-73.

Municipal Engineering. Arguments on municipal ownership.  
Municipal Engineering, xxxiv, 163-165 (1908).  
Bibliography of articles appearing in Municipal Engineering.

Municipal Index, New York, 1913-; annual.  
Reprinted from second issues each month of Municipal Journal; cumulative.

MUNRO, W. B. A bibliography of municipal government in the United States. Cambridge, 1915. 472 pp.  
Publications of the Bureau for research in municipal government, no. 2. Public utilities: pp. 163-227.

National Association of Railway Commissioners. Select list of references on the valuation of public service corporations: compiled by Mary M. Rosemond. Washington? 1912? 25 pp.

National Municipal Review, Philadelphia, vol. i, 1912-; monthly.  
Includes a section on bibliography in each issue.

New York Public Library. Municipal reference library notes.  
New York, vol. i, 1914-; weekly.  
Includes references to public utilities.

Public Affairs Information Service. Bulletin. New York, 1915-; annual.  
An excellent classified index to books, periodical literature and official documents.

Readers' Guide to Periodical Literature, New York, 1900-; monthly, with quarterly, annual and five year cumulations.  
Author and subject index to a selected list of periodicals.

Readers' Guide to Periodical Literature Supplement, New York, 1907-; issued five times a year, with annual and five year cumulations.  
Author and subject index to a selected list of periodicals not included in the Readers' Guide.

REYNOLDS, J. B. Civic bibliography for greater New York. New York, 1911. 296 pp.

Special Libraries, Indianapolis, vol. i, 1910-; monthly.  
Includes frequent lists of references on public utilities. See vol. i, 2-4, 22-23, 36-38, 69-71 (1910); ii, 23-28, 61-63, 118-121 (1911); iii, 20-22, 133-138, 184-186 (1912); iv, 39-42, 184-188 (1913); v, 32-35 (1914); vi, 16-18, 84-86 (1915); vii, 21-28 (1916).

Stone and Webster Library. Current literature references: on public utilities, etc.: construction, operation, finance. Boston, 1907, 1908.

U. S. Library of Congress. List of bibliographies on the regulation of public utilities. Washington, 1916. 4 pp. typewritten.

— A list of books with references to periodicals relating to railroads in their relation to the government and the public: compiled under the direction of A. P. C. Griffin. Washington, 1904. 2d edition, 1907. 131 pp.

Second edition includes a select list of recent works relating to government regulation and government ownership of railroads.

— List of recent references on public service rates: with special reference to regulation (cabs, electricity, gas, street railways, telephone, water). Washington, 1915. Typewritten. Printed also in *Special Libraries*, vii, 21-28 (1916).

— List of references on municipal ownership of gas and electric lighting plants. Washington, 1915. 8 pp. typewritten.

— Monthly list of state publications. Washington, 1910-.

— Select list of books on municipal affairs: with special reference to municipal ownership, with appendix: select list of state documents; compiled under the direction of A. P. C. Griffin. Washington, 1906. 34 pp.

— Select list of books on railroads in foreign countries: government regulation. Compiled under the direction of A. P. C. Griffin. Washington, 1905. 72 pp.

— Select list of references on municipal franchises (supplementing printed list on municipal affairs, 1906). Washington, 1912. Typewritten.

— Select list of references on municipal ownership and operation of street railways (supplementing the printed list on municipal affairs, 1906). Washington, 1912. 7 pp. typewritten.

— Select list of references on public service commissions. Washington? Typewritten.

U. S. Library of Congress. Select list of references on public service rates in the United States and foreign countries (cabs, electricity, gas, street railways, telephones, water). Washington, 1911. 7 pp. typewritten.

Printed also in *Special Libraries*, ii, 118-121 (1911).

— Select list of references on the valuation and capitalization of railroads: compiled under the direction of H. H. B. Meyer. Washington, 1909. 28 pp.

— Select list of references on the valuation and capitalization of railroads (supplementary to the printed list). Washington, 1910. 17 pp. typewritten.

WHITTEN, R. H. Bibliography of valuation and depreciation. (*In* *Valuation of public service corporations*. New York, 1912.) 721-745.

## II. HISTORY OF UTILITIES AND OF REGULATION

### UNITED STATES AND FOREIGN

ADAMS, A. D. Gas versus electricity. *Electrical World and Engineer*, xxxviii, 676-678 (1901).

Discussion of the relative amounts of business done by gas and electric companies. Massachusetts used for illustration; includes tables and a chart.

AGAR, J. G. Shall American cities municipalize? Value of foreign experience as a guide. *Municipal Affairs*, iv, 13-23 (1900).

A popular description of municipal ownership in England and Germany, and a comparison with American conditions. Opposes municipal ownership in America for the present.

BAKER, N. D. Municipal ownership. *Annals of the American Academy of Political and Social Science*, lvii, 188-193 (1915).

States that municipal ownership in Europe was undertaken primarily to lessen taxation; in the United States because of abuses by the companies.

BASSETT, E. M. Rapid transportation in the world's great cities. *Public Service*, x, 175-178 (1911).

BEALE, J. H., and WYMAN, BRUCE. *Railroad rate regulation: with special reference to the powers of the Interstate commerce commission under the acts to regulate commerce*. New York, 1906. 2d edition, 1915. 1210 pp.

Ch. i. Historical introduction.

ii. Statutory regulation.

An excellent, fully annotated review of public utility regulation from the earliest times.

BEMIS, E. W. Gas. (*In Municipal monopolies*. 4th edition. New York, 1904.) 587-628.

An historical sketch of private and municipal ownership in various cities of the United States and Great Britain.

BEMIS, E. W. Street railways. (*In Municipal monopolies.* 4th edition. New York, 1904.) 505-583.  
An extensive historical study. Treats of the history of private traction companies in the United States (pp. 505-565), and of municipal lines in America (pp. 565-569) and in Great Britain (pp. 569-583). Arranged by cities.

BERCOVITZ, D. Continental systems of charging for current by contract. *Electrician*, lxix, 730-732 (1912).  
Abstract. A brief but interesting analysis.

BLOOD, W. H., Jr. Improvements in central station service. *Public Service*, x, 173-174 (1911).  
The gain in twenty years' development of the electrical industry.

BOWKER, R. R. Public control, ownership or operation of municipal franchises? With especial reference to electric lighting. *Municipal Affairs*, i, 605-630 (1897).  
Opposes municipal ownership because of corruption and socialism. Includes a discussion of the results of municipal ownership in various cities, United States and foreign.

CLARK, W. J. Public utilities here and abroad. *Aera*, iii, 451-464 (1914).  
A general survey of utility development, with tables of statistics.

COMMONS, J. R. Labor and municipal politics. (*In Labor and administration.* New York, 1913.) 158-194.  
A reprint of his "Labor and politics."

— Labor and politics. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. I, vol. i, 88-112.  
On the effect of municipal ownership on labor conditions and politics in Great Britain and the United States.  
See also J. W. Sullivan, "The labor report."

CURTIS, C. E. Street railways and their relation to the public. *Yale Review*, vi, 17-36 (1897).  
A very good, early review of comparative franchise and municipal ownership history in the United States, Canada and Great Britain.

FAIRLIE, J. A. Essays in municipal administration. New York, 1908. 374 pp.  
Ch. viii. Recent legislation on municipal functions in the United States.  
xi. Municipal electric lighting in Detroit.

Ch. xii. The street railway question in Chicago.  
xiii. Some considerations on municipal ownership of public utilities.  
xv. Municipal activities in Great Britain.  
xvi. Municipal conditions in some European cities.  
xvii. Municipal government in Vienna.  
xviii. Municipal government in Italy.

Includes historical discussion of the utilities in various cities of Europe and America.

FAIRLIE, J. A. Municipal improvements. (*In* Municipal administration. New York, 1901.) 225-313.  
Waterworks, public lighting and urban transportation, 270-300.  
Municipal ownership, 310-313.  
A very general and elementary historical treatment.

FRANCISCO, M. J. Municipal ownership vs. private corporations: with legal and editorial opinions, tables and cost of lights as furnished by private companies and municipal plants, with list of municipal plants that have been sold or abandoned. Containing also a comparison of English and American gas and railway plants. Rutland, 1898. 150 pp.

GOODNOW, F. J. Powers of municipalities respecting public works. Publications, American Economic Association, ii, 563-581 (1888).  
*In* The relation of modern municipalities to quasi-public works. On the methods of control of public utilities in use in the United States and foreign countries.

GORDON, F. G. R. Street railways of Boston vs. the tramways of Glasgow. Concerning Municipal Ownership, viii, 201-204 (1915).  
The writer opposes municipalization.

HATCH, J. N. The development of the electric railway. Journal of the Western Society of Engineers, xiii, 488-504 (1908).  
Discussion: pp. 504-513. An illustrated historical sketch.

HOWE, F. C. Municipal ownership in Europe. (*In* The modern city and its problems. New York, 1915.) 176-193.  
— Municipal ownership: the testimony of foreign experience. Annals of the American Academy of Political and Social Science, lvii, 194-208 (1915).  
Discusses municipal ownership in Great Britain and Germany especially.  
Favors municipal ownership here.

HOWE, F. C. Municipal ownership: the testimony of foreign experience. (*In* National Civic Federation. Shall the government own and operate the railroads, etc. Affirmative side. New York, 1915.) 31-48.

HUGGINS, W. L. State regulation of public utilities. Public Service, xiv, 175-176 (1913).  
States that commission regulation is "only a return to common law methods."

JAMES, E. J. The relation of the modern municipality to the gas supply. Publications, American Economic Association, i, 54-122 (1886).  
A thorough, but early study of the gas industry in various countries, and its municipalization.

JOHNSON, E. R. Public regulation of street railway transportation. Annals of the American Academy of Political and Social Science, xxix, 275-291 (1907).  
Gives a brief résumé of the regulation in various countries, states and cities. The discussion includes general conclusions for the United States.

MALTBY, M. R. Municipal functions: a study of the development, scope and tendency of municipal socialism. Municipal Affairs, ii, 581-799 (1898).  
Industrial functions: pp. 710-758.  
Causes of increased municipal activity: pp. 759-777.  
Future city functions: pp. 778-787.  
A good popular study.

— Report on the indeterminate franchise for public utilities. New York, 1908. 34 pp.  
Report submitted to the New York public service commission for the first district.  
An excellent summary of the arguments for and against perpetual, term and indeterminate franchises. Includes a discussion of the experience with the indeterminate permit of Massachusetts, Wisconsin, Chicago, Washington, D. C., Porto Rico, Philippines and New York City.

MARTIN, JOHN. Business thrift in American and European cities, especially with respect to franchises. Proc., National Conference for Good City Government, 1905: 154-169.  
A popular discussion of municipal ownership experience in various places, the writer favoring municipalization.

OSBORNE, R. S. Public service: its legal history. *Public Service*, xv, 123-124 (1913).

States that regulation of utilities was part of old common law.

PORTER, R. P. European and American methods and results compared. *Municipal Affairs*, vi, 539-578 (1902).

A popular historical discussion and comparison of municipal ownership in Great Britain and private ownership in the United States; with tables of data. The writer strongly advocates private ownership.

— Municipal trading. *Engineering*, lxxiv, 390-394 (1902).

Abstract. A very general discussion and comparison of municipal ownership in the United States and Great Britain.

— Municipal trading: European and American methods and results compared — the views of an advocate of private ownership of all public utilities. *Municipal Journal and Engineer*, xiv, 222-224, 269-273; xv, 4-8 (1903).

ROBBINS, HAYES. Public ownership versus public control. *American Journal of Sociology*, x, 787-813 (1905).

A discussion and comparison of the results in Great Britain and the United States. The street railway systems of Glasgow and Boston are discussed at length as typical. Favors private ownership under regulation.

ROBINSON, CLIFTON. Tramways of the world. *Tramway and Railway World*, xxiv, 107-112 (1908).

A brief review of tramway history and existing conditions.

ROWE, L. S. The relation of the city to public utilities. (*In Problems of city government*. New York, 1908.) 208-240.

A good elementary discussion, including an historical comparison of municipal and private plants (pp. 218-231), and tables of statistics.

SPRAGUE, F. J. Growth of electric railways. *Proc., American Electric Railway Association*, 1916: 273-317.

Discussion: pp. 317-326. A very interesting illustrated account of the development of the industry.

SULLIVAN, J. W. The labor report. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. I, vol. i, 60-87.

On the effect of municipal ownership on labor conditions and politics in Great Britain and the United States. See his "Municipal and private operation of public utilities: relative to the labor report of the National civic federation" for a reply to criticism.

See also J. R. Commons, "Labor and politics."

SULLIVAN, J. W. Municipal and private operation of public utilities: relative to the labor report of the National civic federation committee on public ownership and operation. New York, 1908. 128 pp.

A reply to criticism of his "The labor report."

U. S. Bureau of the Census. Street and electric railways, 1902. Washington, 1905. 439 pp.

Street railways and European countries: pp. 149-156.

— Street and electric railways, 1907. Washington, 1910. 575 pp.

Foreign tramways and electric railways: pp. 300-323.

WHITTEN, R. H. Supervision of street railways in England and Prussia. Albany, 1909. 76 pp.

Reprinted from Annual report, New York public service commission for the first district, 1908.

WILLIAMS, ARTHUR. Municipal ownership costly and dangerous. Moody's Magazine, ii, 643-649 (1906).

*In* Municipal ownership and operation: symposium.

Experience in various places shows that private operation is cheaper and there is less political danger.

— Municipal ownership of public utilities. (*In* Y. M. C. A., New York, West Side Branch. Public utility economics. New York, 1914.) 31-44.

A very popular argument against municipal ownership, with brief reference to the alleged unsuccessful results in different places.

WYMAN, BRUCE. State control of public utilities. Harvard Law Review, xxiv, 624-634 (1911).

"In large part the preface to Wyman on Public service corporations." An excellent article on the history of regulation, the right to regulate and the duties and privileges of public service corporations.

## UNITED STATES — GENERAL

ADAMS, A. D. Cost of municipal *vs.* private gas. *Municipal Journal and Engineer*, xv, 13-14 (1903).

The writer asserts that municipal plants are more economically managed than private. Includes an analytical table of the average cost of gas in the private and municipal plants of each state.

— Gas rates in the United States. *Municipal Journal and Engineer*, xiii, 63-65 (1902).

— Meter rents and minimum rates. *Electrical World*, lv, 525-527 (1910).

A brief account of the law in various places, — statutory, and court and commission decisions.

— Reasonable rates. *Journal of Political Economy*, xii, 79-97 (1903).

A very excellent, concise review of all the United States supreme court's decisions on rate regulation, with brief discussion.

ADAMS, H. C. Relation of municipal government to public works in the United States. *Publications, American Economic Association*, ii, 507-532 (1888).

*In* The relation of modern municipalities to quasi-public works. Report of an investigation of municipal ownership of gas; includes a table of prices charged.

American Academy of Political and Social Science. Control of municipal public service corporations. *Annals of the American Academy of Political and Social Science*, xxxi, no. 3 (1908). 201 pp.

Public utilities regulation in New York. Henry Bruère.

Development of transit control in New York City. H. C. Wright.

The control of public service corporations in Detroit. D. F. Wilcox.

The Boston consolidated gas company: its relation to the public, its employees and investors. J. L. Richards.

Philadelphia's relation to the rapid transit company. E. O. Lewis.

Franchise grants in New York City. J. J. Murphy.

Recent phases of Chicago's transportation problem. W. E. Hotchkiss.

Public service corporations of New Orleans. Solomon Wolff.

Chicago new charter movement: its relation to municipal ownership. M. J. Foreman.

The public service commissions of the state of New York. H. M. Pollock.

Restrictive legislation against the public service corporations in New Jersey. Frank Bergen.

The finances of the District of Columbia. W. F. Dodd.

The relation of Chicago to the public service corporations. G. C. Sikes.

The result of further legislative regulation of electric railways. J. B. MacAfee.

American Academy of Political and Social Science. The relation of the American municipalities to the gas and electric light supply: a symposium. *Annals of the American Academy of Political and Social Science*, xxvii, 200-233 (1906).

City of New York. R. G. Monroe.

Chicago. H. S. Grosser.

St. Louis. (Unsigned.)

Boston. E. M. Hartwell.

Cleveland. F. E. Stevens.

Buffalo. (Unsigned.)

New Orleans. J. J. McLaughlin.

Milwaukee. J. A. Butler.

District of Columbia. (Unsigned.)

Newark, N. J. (Unsigned.)

Providence. S. A. Sherman.

St. Paul. (Unsigned.)

Grand Rapids. D. F. Wilcox.

Seattle. J. A. Smith.

Duluth. W. G. Joerns.

— The relation of the municipality to the water supply: a symposium. *Annals of the American Academy of Political and Social Science*, xxx, 557-592 (1907).

Chicago. Frederic Rex.

Philadelphia. H. R. Ringe.

Baltimore. H. J. Ford.

Cleveland. E. W. Bemis.

Buffalo. A. C. Richardson.

San Francisco. Murray Gross.

Cincinnati. M. B. May.

New Orleans. J. J. McLaughlin.

Detroit. D. F. Wilcox.

Washington. D. E. Garges.

Providence. F. E. Lakey.

Duluth. W. J. Joerns.

American Economic Association, Committee on Public Finance.

The relation of modern municipalities to quasi-public works.

Publications, American Economic Association, ii, 501-581 (1888).

Relation of municipal government to public works in the United States.  
H. C. Adams.

Electric lighting in the city of Detroit. Charles Moore.

Municipal revenue from street railways. D. R. Dewey.

Powers of municipalities respecting public works. F. J. Goodnow.

BAKER, C. W. Monopolies and the people. New York, 1889.

3d edition, 1899. 368 pp.

Part I, Ch. v. "Municipal monopolies."

II. iv. "Municipal monopolies."

III. ii. "What shall we do with municipal monopolies?"

Part I, Ch. v gives a brief historical sketch of public utility growth.

Part II, Ch. iv sketches the increasing tendency towards monopoly.

Part III, Ch. ii discusses briefly the need for public utility regulation  
and the right to regulate.

BAKER, M. N. Municipal ownership and operation of water-  
works. Annals of the American Academy of Political and  
Social Science, lvii, 279-281 (1915).

— Waterworks. (*In* BEMIS, E. W. Municipal monopolies.  
4th edition. New York, 1904.) 3-52.

A thorough comparative and critical study of municipal and private  
operation of waterworks in the United States, and an analysis of the  
arguments for and against municipalization. The writer favors mu-  
nicipal ownership. Includes many tables of statistics.

BARROW, W. M. State railroad commissions and the courts.  
Freight, vi, 201-207 (1906).

A discussion of judicial review, with a list of the powers of the various  
commissions and syllabi of litigated cases.

BEARD, C. A. Franchises and public utilities. (*In* American  
city government. New York, 1912.) 190-217.

On the former corrupt practices with regard to utility franchises, and  
franchise principles.

— Municipal ownership. (*In* American city government.  
New York, 1912.) 218-241.

A discussion of the theoretical arguments for and against municipali-  
zation, with brief discussion of the results in the United States.

BEMIS, E. W. The latest electric light reports. (*In* Municipal  
monopolies. 4th edition. New York, 1904.) 183-285.

A thorough statistical comparison of municipal and private operation,  
the writer favoring municipal ownership. Includes many tables of  
statistics of operation and of rates.

BEMIS, E. W. Municipal operation versus private operation of municipal monopolies: United States. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. I, vol. i, 122-185.

An extended analysis of the results of municipal operation. The writer believes it conclusively demonstrated that the municipal plants have done far better for taxpayer and consumer than have the private plants.

— Municipal ownership of gas in the U. S. Publications, American Economic Association, vi, 295-471 (1891).  
Exhaustive study of results, with many tables of data.

BOWMAN, H. M. State railroad commissions. (*In* McLAUGHLIN, A. C., and HART, A. B. Cyclopedic of American government. New York, 1914.) iii, 134-135.

Includes tables — by states — of the date of organization of the first commission, and of jurisdiction.

BRADFORD, E. S. Municipal electric lighting. Madison, 1906.  
22 pp.

Wisconsin free library commission, Comparative legislation bulletin no. 5.

Includes statistics of municipal electric plants in various places.

— — Municipal Journal and Engineer, xxiii, 213-217 (1907).  
Review of statistics and conditions in the United States; including the relative increase in municipal and private plants; with references and tables of statistics.

— Municipal gas lighting. Madison, 1906. 18 pp.  
Wisconsin free library commission, Comparative legislation bulletin no. 8.

Includes statistics of municipal gas plants in various cities.

BURDETT, FREDERICK, and FORSTALL, A. E. Engineering matters: United States gas works. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 537-567.

CAHOON, J. B. Municipal electric lighting opposed. Municipal Affairs, vi, 636-647 (1902).

A critical analysis of the results of municipal operation in the United States; with a table of statistics.

CLARK, F. C. State railroad commissions and how they may be made effective. *Publications, American Economic Association*, vi, 473-582 (1891).

History of state railroad commissions, with discussion. Includes tables of the organization, powers and duties of the commissions.

CLARK, W. J. Municipal ownership in Great Britain and in the United States. *Proc., American Street and Interurban Railway Association*, 1907: 271-284.

A comparison of English and American street railways, with analysis of results. The conclusions are strongly in favor of private operation.

COMMONS, J. R., and SULLIVAN, J. W. Labor and politics: United States gas works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 490-536.

—, — Labor and politics: United States water, gas and electricity. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 885-907.

— Municipal electric lighting. *Municipal Affairs*, i, 631-673 (1897).

A thorough comparative and critical study of municipal and private operation in the United States. Includes many tables of statistics of operation and of rates. The writer favors municipal ownership.

— (In BEMIS, E. W. *Municipal monopolies*. 4th edition. New York, 1904.) 55-180.  
Reprint.

CROWELL, H. H. Electric lighting rates and depreciation. *Municipal Journal and Engineer*, xxiii, 698 (1907).  
Gives a table of electric rates in fifteen cities.

CURTIS, C. E. Taxation of street railways for purposes of revenue and control. *Yale Review*, viii, 173-201 (1899).  
A good, technical study. Includes tables showing the practice in various cities of the United States and Canada.

DICKERMAN, J. C. Comparison of electric light and power rates. *Power*, xlvi, 8-15 (1915).  
An excellent comparative study of the rates in many American cities, with many charts and tables; technical.

DICKERMAN, J. C. The cost of producing illuminating gas in American cities, exclusive of returns to capital invested. *Utilities Magazine*, i, no. 1, 10-12 (1915).  
A table of statistics from 19 cities, and discussion.

— The cost of supplying illuminating gas in the smaller American cities, exclusive of returns to capital invested. *Utilities Magazine*, i, no. 2, 19-23 (1915).  
A table of statistics from 74 cities, and discussion.  
Supplementary to his "Cost of producing illuminating gas in American cities, exclusive of returns to capital invested."

— Standards for gas service: established by public service commissions. *Utilities Magazine*, i, no. 6, 16-21 (1916).  
Supplementary to U. S., Bureau of standards, "Standards for gas service" (circular no. 32, 3d edition). Codification of the rules of all commissions.

DIXON, F. H. Recent railroad commission legislation. *Political Science Quarterly*, xx, 612-624 (1905).  
A good discussion of current legislation in various states. Deals only with railroad commissions, but is of some interest for all public utilities.

DOHERTY, H. L. State regulation of lighting enterprises. *American Gas Light Journal*, lxxxix, 92-98 (1908).  
A general historical discussion of the origins and development of the commission movement.

DOWNEY, E. H. Regulation of urban utilities in Iowa. *Iowa City*, 1912. 174 pp.  
Iowa applied history series, i, no. 3. Public service commissions in the United States, pp. 58-100.  
An excellent, thoroughly annotated study of public service commission laws, with tables showing the powers and organization of the various commissions.

DUNN, S. O. The state railway commissions. *Railroad Age Gazette*, xlvi, 123-125 (1909).  
A tabular analysis of the personnel of the various railroad commissions (previous experience, salary, terms, etc.), with discussion.

DURAND, E. D. Street railway franchises, public regulation and public ownership in the United States of America. *Royal Commission on London Traffic*, iv, 593-609 (1906).  
Comprehensive discussion and tabulation of the laws of various states.

FAIRLIE, J. A. Recent extensions of municipal functions in the United States. *Annals of the American Academy of Political and Social Science*, xxv, 299-310 (1905).

Brief account of recent municipal ownership and franchise history in the United States. Includes tables of the geographical distribution of municipal and private water and electric plants.

— Recent legislation on municipal functions in the United States. (*In Essays in municipal administration*. New York, 1908.) 145-163.  
Municipal ownership: pp. 152-158.  
Franchises and public control: pp. 158-163.  
Revised reprint.

FERGUSON, MAXWELL. State regulation of railroads in the south. *Columbia University Studies in History, Economics and Public Law*, lxvii, 1-228 (1916).  
Includes general discussion, history and powers of the commissions in the various states, treated separately, and a general summary of the present commission situation.

FLOY, HENRY. Examples of important appraisals. (*In Valuation of public utility properties*. New York, 1912.) 333-386.  
Composed chiefly of tables of results of various appraisals, with brief comment.

— Public service commissions. (*In Valuation of public utility properties*. New York, 1912.) 32-48.  
A brief sketch of commission history and results.

FORD, F. R. The holding company: its advantages and disadvantages. *Electric Railway Journal*, xlvi, 23-27 (1914).  
A good analysis, with tables of statistics.

— Passenger rates and fares in cities with surface street railways and elevated railroads or subways. *Proc., American Electric Railway Association*, 1912: 277-294.  
Memorandum with "Report of the committee on determining the proper basis for rates and fares."  
A valuable study, by cities, with tables of statistics.

— — — *Aera*, i, 400-409 (1912).  
Abstract.

— — — *Electric Railway Journal*, xl, 1108-1112 (1912).  
Abstract.

FORD, F. R. Valuation of intangible street railway property. *Annals of the American Academy of Political and Social Science*, xxxvii, 119-141 (1911). Includes a brief review of the treatment of intangibles in certain traction valuations.

FRANCISCO, M. J. The business of municipalities and private corporations compared: data that proves municipal ownership waste exceeds corporate profit. *Rutland*, 1905 ? 136 pp. Many plants considered alphabetically by cities; only a sentence or two about each.

— Municipalities *vs.* private corporations: political and business management. *Rutland*, 1900. 172 pp.  
"Tables showing cost of lights furnished by private companies and municipal plants, a list of municipal plants sold or abandoned, experience of municipalities, legal and editorial opinions."

— Municipal ownership: its fallacy, with legal and editorial opinions, tables and cost of lights as furnished by private companies and municipal plants. *Rutland*, 1893. 104 pp. Arranged by cities, with only a few sentences about each city.

GONDEN, H. J. Robbing Peter. *Public Service*, xvii, 37-38 (1914).  
Abstract. Discusses concealment in municipal plant reports.

GRAY, J. H. General history and legislation: United States gas works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 426-489.

— General history and legislation: United States waterworks. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 1-135.

— Public service commissions. Proc., American Political Science Association, iv, 324-335 (1907). A discussion of papers by W. H. Hatton and T. M. Osborne. Briefly considers the regulation in certain states.

GRUHL, EDWIN. Policies of regulating bodies. *Aera*, iii, 24-33, 113-123 (1914). A very interesting study, considering the different attitude of the various commissions on several regulation problems.

GRUHL, EDWIN. Recent tendencies in valuations for rate-making purposes. *Annals of the American Academy of Political and Social Science*, liii, 219-237 (1914).

An excellent review of court and commission attitude, with many quotations from the cases. Summarizes the conclusions.

GWINN, D. R. Water rates charged in 375 cities. *Proc., American Waterworks Association*, xxviii, 209-222 (1908).

Discussion: pp. 223-238. Tabulated results of a questionnaire.

Rates of private plants: pp. 216-218; rates of municipal plants: pp. 219-222.

HAGENAH, W. J. The development of the true function of the commission. *Electrical World*, lxvii, 16-17 (1916).

Review of commission regulation in 1915.

HARD, WILLIAM, and GRAY, J. H. General history and legislation: United States electricity works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 665-748.

Considers Chicago, Detroit and South Norwalk only.

HASKINS, C. W., and JOHNSON, J. F. The recent history of municipal ownership in the United States. *Municipal Affairs*, vi, 524-538 (1903).

The writer concludes that the insufficient and controversial evidence makes a general decision impossible at present.

HATCH, A. S. Cost of electric lighting in cities. *Municipal Engineering*, xxxi, 201-203 (1906).

Abstract. A tabulation of the rates in many American cities, with some discussion.

HEILMAN, R. E. Commission control of refunding utility securities. *Utilities Magazine*, i, no. 4, 26-30 (1916).

Contains many citations of court and commission decisions.

— The development by commissions of the principles of public utility capitalization. *Journal of Political Economy*, xxiii, 888-909 (1915).

An excellent annotated study, with a brief discussion of the attitude of the various commissions on important capitalization problems.

HEILMAN, R. E. Development by commissions of the principles of public utility valuation. *Quarterly Journal of Economics*, xxviii, 269-291 (1914).

An excellent annotated study, with a brief discussion of the attitude of the various commissions on certain important valuation problems.

— Some economic aspects of waterworks valuation. *Journal of the American Waterworks Association*, ii, 538-543 (1915).

A brief discussion of the attitude of various commissions towards going value.

HEIM, J. B. Meter rates. *Proc., American Waterworks Association*, xxiv, 251-267 (1904).

Discussion: pp. 277-289. An account of a rate controversy in Madison; includes an elaborate table of waterworks statistics and charges in various American cities.

HENDERSON, C. R. Competitive waterworks. *Proc., American Waterworks Association*, xxviii, 519-524 (1908).

Discussion: pp. 525-527. A brief account of competition by municipal plants in various cities, with discussion of the cause and results.

HILLS, A. S. The origin, growth and work of public utility commissions. *Public Service*, xii, 58-61 (1912).

Popular.

HODGKINS, H. C. Franchises of public utilities as they were and as they are. *Journal of the American Waterworks Association*, ii, 739-758 (1915).

A very interesting study, giving a brief review of franchise history, tables of the terms of franchises in each state and of the kinds of utilities coming under the jurisdiction of the various commissions, with discussion.

HOWE, F. C. The city and the public service corporation. (*In The modern city and its problems*. New York, 1915.) 149-164.

A general and rather indefinite historical sketch, emphasizing corruption in the past.

— Municipal ownership in America. (*In The modern city and its problems*. New York, 1915.) 165-175.

A popular historical treatment.

HUEBNER, G. G. Five years of railroad regulation by the states. *Annals of the American Academy of Political and Social Science*, xxxii, 138-156 (1908). An excellent tabulation of the commission laws, 1902-1907. Supplementary to U. S., Interstate commerce commission, "Railways in the United States in 1902" (part IV).

HUMPHREYS, C. J. R. The development of the public utilities commissions as applied in the gas and electric business. *American Gas Light Journal*, xci, 223-233 (1909). An historical account of the origin of the commission movement and an outline of the earlier commission laws in various states.

JOHNSON, E. R. *American railway transportation*. New York, 1903. 2d revised edition, 1909. 434 pp.  
Ch. xxv. Regulation of railways by the American state governments: the state commissions.  
xxvii. The courts and railway regulation.  
xxviii. Railway taxation.  
Good elementary discussion, with references. Of some interest for all public utilities.

— Elements of transportation: a discussion of steam railroad, electric railway, and ocean and inland water transportation. New York, 1909. 360 pp.  
Ch. xix. Origin and growth of electric railways.  
xx. Urban electric railways.  
xxi. Interurban and rural electric railways.  
An historical and descriptive account; illustrated with photographs and maps.

— Railway regulation by the states: the state commissions. (*In Elements of transportation*. New York, 1909.) 132-139.  
An elementary historical account.

— Regulation of railways by the American state governments: the state commissions. (*In American railway transportation*. 2d revised edition. New York, 1909.) 349-366.  
An elementary historical account of some interest for all public utilities.

—, and VAN METRE, T. W. — (*In Principles of railway transportation*. New York, 1916.) 467-491.  
An elementary historical account, of some interest for all public utilities.

JOHNSON, E. R. The trend of governmental regulation of railroads. *Annals of the American Academy of Political and Social Science*, xxxii, 120-124 (1908).  
Treats of railroads only, but is of some general interest as a brief résumé of early legislative and commission regulation of rates.

JONES, S. P. What certain cities have accomplished without state regulation. *Annals of the American Academy of Political and Social Science*, lvii, 72-82 (1915).  
Argument for local regulation, with brief accounts of the experience in various cities.

KERR, W. D. Qualifications needed for public utilities commissioners. *Annals of the American Academy of Political and Social Science*, liii, 19-35 (1914).  
An excellent annotated classification of the requirements of the commission laws of all states, with discussion.

KING, C. L. The need for regulation. (*In* The regulation of municipal utilities. New York, 1912.) 3-22.  
A good elementary account of the history and need for regulation.

— Rules regulating water service adopted by state public service commissions. *Utilities Magazine*, i, no. 9, 19-23 (1916). Codification of the rules of all commissions.

KLUMPP, J. B. Summary of commission regulations governing gas supply. *American Gas Light Journal*, ciii, 75 (1915).  
An excellent tabular summary.

KOINER, C. W. Municipal ownership and operation of electric utilities on the Pacific coast. *Proc., American Society of Municipal Improvements*, 1914: 347-367.  
A brief discussion of the plants and operating results in various western cities; includes tables.

LEE, E. B. The public utility movement: public service commissions. *Moody's Magazine*, xiii, 465-469 (1912).  
Brief, popular historical account.

MACAEE, J. B. Result of further legislative regulation of electric railways. *Annals of the American Academy of Political and Social Science*, xxxi, 161-166 (1908).  
An argument against restrictive legislation as curtailing enterprise.

McCULLOCH, RICHARD. The present tendency of public service regulation. Proc., American Electric Railway Association, 1913: 320-335.  
Includes a tabular analysis of the laws by states.

— — — Electric Railway Journal, xlvi, 858-860 (1913).  
Abstract.

— — — Tendency of utility regulation. Public Service, xv, 159-161 (1913).  
Abstract.

MCGRATH, D. J. Long rides for a nickel. Electric Railway Journal, xlviii, 222-225 (1916).  
Maps of the single-fare zones in twenty-five typical American cities, with brief discussion.

MCLEAN, S. J. State regulation of railways in the United States. Economic Journal, x, 349-369 (1900).  
A thoroughly annotated historical study.

MALTBY, M. R. Public service commissions. (*In McLAUGHLIN, A. C., and HART, A. B. Encyclopedia of American government. New York, 1914.*) iii, 108-110.

MARSTON, GLENN. Facts on municipal ownership in 268 towns and cities. Chicago, 1915. 32 pp.  
Alphabetical by cities; only a few sentences about each city.

— — — The fallacies of municipal ownership. Public Service, xiv, 107-108, 147-149, 187-188 (1913).  
A popular argument against municipal ownership, with brief discussion of the results in various places.

— — — 200 municipal ownership failures. Chicago, 1912? 29 pp.  
Arranged by cities, with only a sentence about each city.

MARTIN, T. C. Electric railroads. (*In McLAUGHLIN, A. C., and HART, A. B. Encyclopedia of American government. New York, 1914.*) iii, 138-140.

MARWICK, MITCHELL AND COMPANY. Financial matters: United States electricity works. (*In National Civic Federation. Municipal and private operation of public utilities. New York, 1907.*) Pt. II, vol. i, 803-844.  
Considers Allegheny, Chicago, Detroit and South Norwalk only.

MARWICK, MITCHELL AND COMPANY. Financial matters: United States waterworks. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 353-425.

MAURY, D. H. Engineering matters: United States waterworks. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 159-352.

METCALF, LEONARD. Private fire protection service charges. Proc., American Waterworks Association, xxxiii, 127-152 (1913). Discussion: pp. 158-190. An account of an investigation supplementing Metcalf, Kuichling and Hawley, "Some fundamental considerations in the determination of a reasonable return for public fire hydrant service."

—, KUICHLING, E., and HAWLEY, W. C. Some fundamental considerations in the determination of a reasonable return for public fire hydrant service. Proc., American Waterworks Association, xxxi, 55-117 (1911). Includes tables of rates charged in different cities. For a supplementary study, see Leonard Metcalf, "Private fire protection service charges."

Milwaukee Gas Light Company. Prices charged for gas in various cities of the United States from 1885 to 1907, inclusive. Milwaukee, 1907? 28 pp. An excellent and very complete tabulation.

MOORE, CHARLES. Electric lighting in the city of Detroit. Publications, American Economic Association, ii, 539-550 (1888). *In* The relation of modern municipalities to quasi-public works. Historical; includes a table of the charges for street lighting in various cities.

NASH, L. R. Development of commission regulation. Stone and Webster Public Service Journal, xv, 18-27 (1914). A tabular analysis, chart and discussion of the authority and jurisdiction of the various state commissions.

National Civic Federation. Commission regulation of public utilities: a compilation and analysis of laws of forty-three states and of the federal government for the regulation by

central commissions of railroads and other public utilities. New York, 1913. 1284 pp.

National Civic Federation. Draft bill for the regulation of public utilities: with documents relating thereto. New York? 1914. 124 pp.

Includes a table showing the number of commissioners, their terms, salaries, and manner of selection, for the various state commissions (pp. 111-114).

NORTON, W. J. Approval of demand rates by public service commissions. Electrical Review and Western Electrician, lxv, 960-961 (1914).

States briefly the attitude of the commissions in various states.

— Effects of the indeterminate franchise under state regulation. Annals of the American Academy of Political and Social Science, liii, 135-147 (1914).

A good, annotated account of the law and experience of various states.

— State regulation. Electrical Review and Western Electrician, lxvi, 632-633 (1915).

A very brief but interesting discussion of various commissions, the writer asserting that their ill success has been due to poor appointments and politics.

NUTTING, H. G. D. Is regulation failing? Electrical Review and Western Electrician, lxv, 811-812 (1914).

Popular and very general.

PARSONS, FRANK. Public ownership. (*In* The city for the people. Philadelphia, 1900?) 17-254.

An arraignment of the public service corporations for alleged abuses and corruption, and an argument for municipal ownership. Includes many quotations from other writers and some statistics; very popular in style.

PARSONS, W. B. Underground railways in the United States. Trans., American Society of Civil Engineers, liv, part F, 349-366 (1904).

Discussion: pp. 367-376. A technical engineering description, with many diagrams.

PATTON, W. A. At what rate can water be profitably sold when pumped against a 300-foot head? Proc., American Waterworks Association, xxiv, 490-496 (1904).

A discussion of the rates in various places.

PIKE, C. W. Service standards for electric light and power companies as prescribed by public service commissions. *Utilities Magazine*, i, no. 5, 21-28 (1916).

See revised codification.

— — — Utilities Magazine, i, no. 7, 30-40 (1916).

Revised codification of the rules of all commissions.

RIGGS, H. E. The valuation of public service corporation property. *Trans., American Society of Civil Engineers*, lxxii, 1-173 (1911).

Discussion: pp. 174-300. Includes discussion of the various state railroad appraisals. Rather technical.

RIPLEY, W. Z. Physical valuation of railroads. *Political Science Quarterly*, xxix, 569-599 (1914).

An annotated critical and historical study, of some interest for municipal utilities.

— Physical valuation: reasonable rates. (*In Railroads: finance and organization*. New York, 1915.) 331-370.

ROSAMOND, S. J. What would be a fair basis for fixing water rates for fire and domestic service? *Proc., American Water-works Association*, xxv, 132-138 (1905).

Discussion: pp. 139-150. An analysis of the rates of seventy cities; with large comparative tables of statistics.

ROSEWATER, VICTOR. Municipal ownership of electric lighting. *Independent*, lv, 93-96 (1903).

A brief but interesting account of the growth of the municipal ownership movement in the United States; with one table of statistics. The writer favors municipalization.

SCOBELL, E. C. Variations in public service systems of accounting. *Proc., National Electric Light Association*, 1914: accounting session, 188-193.

A brief résumé of some of the differences in the requirements of various commissions.

SHARFMAN, I. L. Commission regulation of public utilities: a survey of legislation. *Annals of the American Academy of Political and Social Science*, liii, 1-18 (1914).

An excellent account of the provisions of the commission laws of all states, thoroughly annotated.

SHARFMAN, I. L. Regulation by the states. (*In* Railway regulation. Chicago, 1915.) 139-171.  
Reprint of "Commission regulation of public utilities: a survey of legislation."

SPENCER, A. W. The prevention of stock-watering by public service corporations. *Journal of Political Economy*, xiv, 542-552 (1906).  
A good discussion of the principles of the regulation of securities issues and of the practice of the different states. The writer advocates separate state laws applying to public service corporations.

STEBBINS, THEODORE, and PHELPS, C. E., Jr. Engineering matters: United States electricity works. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 759-802.  
Considers Allegheny, Chicago, Detroit and South Norwalk only.

SULLIVAN, J. W., and COMMONS, J. R. Labor and politics: United States waterworks. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 136-158.

THELEN, MAX. Report on leading railroad and public service commissions. Sacramento, 1912. 98 pp.  
An excellent report on the organization and work of the public service commissions of Oregon, Washington, Nebraska, Minnesota, Wisconsin, New York, Massachusetts, Maryland, Georgia, Texas and Oklahoma.

TINGLEY, C. L. S. Present tendency of public utility laws and regulations. *Proc., American Electric Railway Association*, i, 301-320 (1913).  
A rather general discussion of commission developments and especially of the new Illinois commission law; with quotations from court decisions.

U. S. Bureau of the Census. Central electric light and power stations, 1902. Washington, 1905. 175 pp.  
Franchises: pp. 82-85.  
History and development of electric lighting: pp. 86-104.

— Central electric light and power stations, 1907. Washington, 1910. 197 pp.

U. S. Bureau of the Census. Central electric light and power stations and street and electric railways: with summary of the electrical industries, 1912. Washington, 1915. 440 pp.  
Central electric light and power stations: pp. 1-176.  
Street and electric railways: pp. 179-409.

— Street and electric railways, 1902. Washington, 1905.  
439 pp.  
Franchises, public regulation and public ownership: pp. 126-148.  
History and development of electric traction: pp. 159-171.  
Construction and equipment: pp. 172-229.

— Street and electric railways, 1907. Washington, 1910.  
575 pp.  
Fares and transfers: pp. 248-252.  
Franchises, public regulation and public ownership: pp. 291-299.

U. S. Bureau of Standards. Standard regulations for manufactured gas and gas service. Washington, 1913. 170 pp.  
Circular no. 32; second edition. Superseding "State and municipal regulations for the quality, distribution, and testing of illuminating gas."  
Contains suggested regulations, and a review of existing regulations.  
Technical.

— Standards for electric service. Washington, 1916. 262 pp.  
Circular no. 56; first edition. An excellent classification and tabulation of the various state and municipal regulations; with discussion of proposed standards. Technical.

— Standards for gas service. Washington, 1915. 197 pp.  
Circular no. 32; third edition. Superseding "Standard regulations for manufactured gas and gas service."  
Consists largely of suggested regulations, but includes a summary of regulations now in force. Technical.

— State and municipal regulations for the quality, distribution, and testing of illuminating gas. Washington, 1912.  
133 pp.  
Circular no. 32; first edition. An excellent classification and tabulation.  
Technical.

U. S. Interstate Commerce Commission. Railways in the United States in 1902. Washington, 1903. 5 vols.  
Part IV: State regulation of railways. 416 pp.

Appendix to sixteenth annual report. An excellent tabulation of the commission laws and their changes since 1890. For a supplementary compilation, see G. G. Hueber, "Five years of railroad regulation by the states."

**WAGNER, B. M.** Rates for water supply. *Journal of the New England Waterworks Association*, xxix, 1-48 (1915).

A very good general article, including an account of water rate history.

**WARNER, G. E.** Public ownership of lighting plant. *City Government*, vi, 50-52 (1899).

On municipal ownership history in Rochester and elsewhere.

**WHIPPLE, F. H.** The cost of public lighting. (*In Municipal lighting*. Detroit, 1889.) 120-217.

Alphabetical, by cities.

— The ownership of central stations. (*In Municipal lighting*. Detroit, 1889.) 80-106.

Alphabetical by cities.

**WHITEHORNE, E. E.** The value of the poor man's business. *Electrical World*, lxvii, 201-203 (1916).

Popular account of the use of controlled flat rates in various cities; illustrated with photographs.

**WHITTEN, R. H.** Taxation of corporations in New York, Massachusetts, Pennsylvania and New Jersey. *New York State Library Bulletin*, no. 61: 617-810 (1901).

Includes public service companies.

**WILCOX, D. F.** Effects of state regulation upon the municipal ownership movement. *Annals of the American Academy of Political and Social Science*, liii, 71-84 (1914).

An excellent discussion of some of the problems and results of commission regulation in the various states.

— Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities. New York, 1910-1911. 2 vols.

An exhaustive treatise, in popular form, including an account of the franchises in force in practically all important American cities. For list of chapters, see p. 131.

— Street railway resettlements and negotiations for municipal ownership. *National Municipal Review*, iii, 745-751 (1914). Brief sketches of the situation in various American cities.

ZUEBLIN, CHARLES. Municipal railway regulation. (*In American municipal progress.* Revised edition. New York, 1916.) 30-54.

A very popular historical sketch of the street railways in certain American cities.

ALABAMA

*Birmingham*

GORDON, F. G. R. Municipal ownership in Birmingham. *Concerning Municipal Ownership*, ix, 174-175 (1916).

CALIFORNIA

EASTWOOD, J. S. The railroad commission and the public. *Journal of Electricity, Power and Gas*, xxxii, 51-54 (1914). Discussion of state *vs.* local regulation in California. Favors state control.

ESCH, FRED. Utility law variations. *Public Service Regulation*, i, 492-494 (1912).

A comparison of the California and Wisconsin acts.

ESHLEMAN, J. M. State and municipal control of utilities. *Public Service Regulation*, i, 587-593 (1912).

Abstract.

— State *vs.* municipal regulations of public utilities. *National Municipal Review*, ii, 11-23 (1913).

On the combination of state and local regulation in California, favoring state control.

PLEHN, C. C. The taxation of franchises in California. *National Municipal Review*, i, 337-354 (1912).

A good historical and critical account.

SINSHEIMER, P. A. Ten rules for service: principles applied by the railroad commission of California to the regulation of public utility service. *Annals of the American Academy of Political and Social Science*, liii, 292-306 (1914).

THELEN, MAX. A California problem. *Public Service Regulation*, i, 662-663 (1912).

Discusses question of whether California municipalities should delegate to the state commission their powers over public utilities.

THELEN, MAX. California's new law. *Public Service Regulation*, i, 260-262 (1912).

Analysis of the act of 1912.

— Public utility regulation in California. *Proc., National Electric Light Association*, 1915: general session, 263-270.  
Brief historical sketch of electric utilities and regulation in California.

WHITTLESEY, J. T. The success of municipal lighting plants in California. *Pacific Municipalities*, xxvii, 701-712 (1913); xxviii, 5-16 (1914).

#### *Alameda*

GOLDSWORTHY, A. D. Municipal electric lighting in Alameda, California. *American City*, xi, 144-146 (1914).

Brief description, illustrated with photographs.

KAHN, J. B. Alameda municipal electric light plant. *Journal of Electricity, Power and Gas*, xxxi, 455-460 (1913).

History and description, with photographs and statistics.

#### *Glendale*

ALLISON, LER. W. Glendale municipal electric lighting plant. *Power*, xlvi, 60-61 (1915).

A very brief account of the plant and its operating results.

#### *Los Angeles*

MOHLER, C. K. Public utility regulation by Los Angeles. *Annals of the American Academy of Political and Social Science*, liii, 108-118 (1914).

A discussion of the powers and work of the commission.

WORKS, L. R. The board of public utilities of Los Angeles. (*In* KING, C. L. The regulation of public utilities. New York, 1912.) 208-218.

A brief, popular account of the commission and its work.

#### *Palo Alto*

BYXBEE, J. F., Jr. Experience with the diesel-engine in the municipal power plant of Palo Alto, Calif. *Engineering and Contracting*, xlvi, 44-47 (1916).

Engineering description, with one photograph.

*Pasadena*

CARR, W. J. Does municipal ownership pay? Pasadena's success in municipal ownership and certain aspects of the enterprise. *Pacific Municipalities*, xxvii, 142-145 (1913).

KOINER, C. W. Pasadena's municipal light and power plant. *Annals of the American Academy of Political and Social Science*, lvii, 209-227 (1915).

Historical account, with tables of rates charged. Favors municipal ownership.

SLAVIN, MATTHEW. Municipal electricity in Pasadena. *Public Service*, viii, 105-108 (1910).

*Riverside*

BACKSTRAND, C. F. Riverside's municipal power plant. *Journal of Electricity, Power and Gas*, xxx, 153-155 (1913). Engineering description, with photographs.

*San Francisco*

ARNOLD, B. J. Foundation principles in valuation. *Electric Railway Journal*, xlvi, 713-719, 803-806 (1915). Abstract.

— Foundation principles of utility valuation with special application to plans for resettlement. *Aera*, iv, 189-214 (1915). Abstract.

— Foundation principles of utility valuation with special application to resettlement plans. *Proc., American Electric Railway Association*, 1915: 139-187.

Discussion: pp. 188-198. Notes on San Francisco traction resettlement: pp. 176-178; with a chart.

— Franchise and legal matters. (*In Report on the improvement and development of the transportation facilities of San Francisco*. San Francisco, 1913.) 359-410.

— Report on legal and franchise matters, charter amendments to the Board of supervisors, city of San Francisco. ?, 1912. 28 pp.

— Report on the improvement and development of the transportation facilities of San Francisco. *San Francisco*, 1913. 475 pp.

*San Francisco*—continued.

BALDWIN, A. S. Shall San Francisco municipalize its water supply? *Municipal Affairs*, iv, 317-328 (1900).

A popular analysis, opposing municipal ownership under the existing circumstances.

CLEARY, A. J. Municipal street railways. *Engineering News*, lxxiii, 320-324 (1915).

In a series of articles entitled "The municipal engineering works of San Francisco."

A good description, illustrated with photographs and diagrams, and including some statistics.

— San Francisco's new municipal street railways. *Engineering News*, lxxii, 1020-1022 (1914).

An engineering description, illustrated with a photograph and map.

GROSS, MURRAY. San Francisco, Cal. *Annals of the American Academy of Political and Social Science*, xxx, 575-578 (1907).

*In* The relation of the municipality to the water supply: a symposium. Very brief historical and descriptive account of the water service.

OST, P. J. The municipal railways of San Francisco. *Journal of Electricity, Power and Gas*, xxxiii, 333-340 (1914).

Description, illustrated with photographs.

SCHUSSLER, HERMANN. San Francisco's water supply. *Public Service*, viii, 25-27 (1910).

History and description.

WALCOTT, E. A. The municipal railways of San Francisco. *National Municipal Review*, iii, 554-556 (1914).

Analysis of results, the writer concluding that the undertaking has been a success.

ZUEBLIN, CHARLES. Municipal railway regulation. (*In American municipal progress*. Revised edition. New York, 1916.)

30-54.

San Francisco's municipal railway: pp. 52-54.

Brief historical sketch; very popular.

### *Santa Clara*

MOORE, C. E. Experience with a municipal gas plant. *Public Service*, ii, 51-52 (1907).

History of municipal ownership in Santa Clara, with conclusions as to the general desirability of municipal ownership.

## COLORADO

STALEY, D. H. Colorado in litigation. *Public Service Regulation*, i, 36-37 (1912).

Brief historical sketch of the railroad commission and legislation.

### *Denver*

BRASHEARS, W. F. Denver waterworks controversy. *Public Service*, ix, 101-104 (1910).

A very popular, historical sketch.

DEACON, W. G. A city's lost honor. *Public Service*, xvi, 147-148 (1914).

A popular account of Denver's relations to the waterworks company.

GENTRY, R. G. Denver's famous street lighting. *Public Service*, v, 4-5 (1908).

Description, illustrated with photographs.

KING, C. L. The history of the government of Denver, with special reference to its relations with public service corporations. Denver, 1911. 322 pp.

MAYFIELD, A. U. Public services of Denver. *Public Service*, ii, 7-14 (1907).

Each kind of utility service described separately, with photographs.

## CONNECTICUT

### *Norwich*

JENSEN, M. E. Experiment conducted at Norwich, Conn. *New England Magazine*, n. s., xxxv, 338-342 (1906).

Description of the municipal plant, and analysis of results.

### *South Norwalk*

WINCHESTER, A. E. South Norwalk's municipal electric works. *Annals of the American Academy of Political and Social Science*, lvii, 228-245 (1915).

Historical, with comparison of the private and municipal plants. Some general discussion of municipal ownership.

### *Wallingford*

PIERCE, A. L. Municipal lighting in Wallingford, Conn. *Municipal Affairs*, vi, 820-823 (1903).

Very brief historical sketch, with analysis of results.

## DISTRICT OF COLUMBIA

*Washington*

GARGES, D. E. Washington, D. C. Annals of the American Academy of Political and Social Science, xxx, 585-588 (1907).  
*In* The relation of the municipality to the water supply: a symposium. Historical and descriptive account of the water service.

## FLORIDA

*Jacksonville*

AUSTIN, C. C. Jacksonville municipal power plant. Power, xxxvii, 622-624 (1913). Description, with photographs and diagrams.

BARRS, J. M. Municipal ownership in Jacksonville, Florida. Proc., National Conference for Good City Government, 1906: 257-265. An analysis of the results of operation, the writer favoring municipal ownership.

DEACON, W. G. The truth about Jacksonville. Public Service, xvi, 113-117 (1914). Experience with the municipal electric plant; includes one photograph.

GORDON, F. G. R. The Jacksonville municipal electric lighting plant. Concerning Municipal Ownership, ix, 153-155 (1916). Analysis of results.

WORTHINGTON, THOMAS. Regulation *vs.* municipal ownership. Public Service, xvi, 23-25 (1914). A popular argument against municipal ownership, with brief reference to the municipal plants of Jacksonville.

## GEORGIA

COLLIER, W. R. The sale of current to municipally owned distributing systems by central stations. Electrical Review and Western Electrician, lxvii, 890-893 (1915). Embodies the results of a study in Georgia, illustrated with tables and charts.

*Atlanta*

BECK, H. C. Atlanta's municipal waterworks. Public Service, ii, 137-140 (1907). A statistical analysis of results.

*Quitman*

CROWELL, F. B. Quitman municipal water and light plant. Power, xliii, 786-787 (1916). Description, with photographs and tables.

IDAHO

WALKER, H. B. Government furnishes cheap electricity. Power, xli, 228-229 (1915).

Electricity sold to small towns in southern Idaho by a government hydroelectric plant, which forms part of the Minidoka irrigation project. Gives tables of rates charged.

ILLINOIS

BENNETT, C. G. Illinois utilities commission and the waterworks companies. Journal of the American Waterworks Association, ii, 382-389 (1915).

A brief historical sketch and discussion.

FAIRLIE, J. A. Public utility legislation in Illinois. National Municipal Review, iii, 28-33 (1914).

Historical sketch of the legislation leading up to the enactment of the commission law.

FEUSTEL, R. M. Some aspects of the work of the Illinois utilities commission. Journal of the Western Society of Engineers, xix, 965-974 (1914).

Discussion: pp. 974-978. Considers chiefly the organization and work of the engineering department.

FRENCH, H. J. Laying foundation for new commission. Public Service, xi, 205-207 (1911).

An Illinois committee makes an eighteen-month investigation tour before preparing the commission law.

Illinois Bureau of Labor Statistics. Report, 1898. Springfield, 1899. 271 pp.

Private and municipal ownership of public works: pp. 3-41.

LOOMIS, H. B. Franchise taxation in Illinois. Municipal Affairs, v, 388-400 (1901).

A popular account, with tables.

NORTON, W. J. Illinois public utility commission law and municipal ownership law: with annotations, marginal notes and index-digest. Chicago, 1913. 200 pp.

ROBINSON, M. H. The public utilities commission. (*In A report on supervision of corporations and related business. Chicago, 1914.*) 39-48.

Report prepared for Efficiency and economy committee, Illinois legislature.

A good historical sketch.

SMITH, E. B. Street railway legislation in Illinois. *Atlantic Monthly*, xciii, 109-118 (1904).

A very popular, historical account.

TINGLEY, C. L. S. Present tendency of public utility laws and regulations. *Proc., American Electric Railway Association*, i, 301-320 (1913).

A rather general discussion of commission developments and especially of the new Illinois commission law; with quotations from court decisions on regulation.

WHERRY, W. M., Jr. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania, and West Virginia. ?, 1913. 91 pp. Each law analyzed separately by sections.

#### *Chicago*

ARNOLD, B. J. City transportation: subways and railroad terminals. *Journal of the Western Society of Engineers*, xix, 325-347 (1914).

Discussion: pp. 347-368. An account of a study made for the city of Chicago; illustrated with many diagrams.

— Foundation principles in valuation. *Electric Railway Journal*, xlvi, 713-719, 803-806 (1915).

Abstract.

— Foundation principles of utility valuation with special application to plans for resettlement. *Aera*, iv, 189-214 (1915).

Abstract.

— Foundation principles of utility valuation with special application to resettlement plans. *Proc., American Electric Railway Association*, 1915: 139-187.

Discussion: pp. 188-198. Notes on Chicago traction resettlement: pp. 169-173; with charts.

*Chicago* — continued.

**ARNOLD, B. J., FLEMING, H. B., and WESTON, GEORGE.** Phases in the development of the street railways of Chicago. *Journal of the Western Society of Engineers*, xiv, 641-668 (1909).

An historical sketch. B. J. Arnold: pp. 641-646.

Street railway car house design and operation. H. B. Fleming: pp. 646-652.

Work of the Board of supervising engineers. George Weston: pp. 653-668.

Discussion: pp. 668-672.

— Report on the engineering and operating features of the Chicago transportation problem. New York, 1905. 3 vols. "Report to Chicago city council."

**BARD, E. F.** The street railways of Chicago: accountant's report. *Municipal Affairs*, v, 484-594 (1901).

**BEMTS, E. W.** Report upon the price of gas in Chicago for the Chicago council committee on gas, oil, and electric light. Chicago, 1911. 31 pp.

Includes many tables of statistics.

**COMMONS, J. R.** Economic and social factors in Chicago municipal lighting. *Municipal Affairs*, vi, 109-115 (1902).

An historical analysis, with conclusions favorable to municipal ownership; includes tables of statistics.

**DARROW, C. S.** The Chicago traction question. *International Quarterly*, xii, 13-22 (1905).

History of street railways in Chicago, and of the municipal ownership movement.

**DEACON, W. G.** The Chicago traction plan. *Public Service*, xiii, 165-172 (1912).

Describes municipal control by engineering boards. Discusses the history of traction service in Chicago; with a map, charts and photographs.

**DUNNE, E. F.** Municipal ownership in Chicago. *Moody's Magazine*, ii, 522-526 (1906).

*In* Municipal ownership and operation: symposium.

Popular, historical account of the attempt to municipalize traction in Chicago. Favors municipal ownership.

*Chicago*—continued.

ELLICOTT, E. B. Chicago's experience with municipal lighting.  
Municipal Affairs, vi, 815-820 (1903).  
Popular historical and analytical treatment.

— Chicago's lighting plant: its progress under municipal ownership. Municipal Engineering, xx, 33-35 (1901).  
Abstract. An account of the results of municipal ownership in Chicago; the writer favoring municipalization.

— Municipal electric lighting in Chicago. Engineering Record, xlvi, 176-180 (1901).  
Brief abstract of a report of thirteen years' operation.

— The Robert A. Waller municipal lighting plant. Journal of the Western Society of Engineers, v, 566-569 (1900).  
Discussion: pp. 569-570. A brief engineering description.

— Thirteen years' experience with municipal street lighting at Chicago, Ill. Engineering News, xlvi, 317 (1901).  
Very brief abstract of a report of thirteen years' operation.

FAIRLIE, J. A. The Chicago street railways: a supplementary note. Quarterly Journal of Economics, xxii, 476-479 (1908).  
Supplementary to "The street railway question in Chicago."

— The street railway question in Chicago. Quarterly Journal of Economics, xxi, 370-403 (1907).  
A thorough historical study.

— — (In Essays in municipal administration. New York, 1908.) 230-261.  
Reprint.

FAY, C. N. The city gets fifty-five per cent. Outlook, xcii, 407-413 (1909).  
A very popular account of the Chicago traction settlement, by which 55 per cent of gross earnings are paid to the city.

GROSSER, H. S. Chicago. Annals of the American Academy of Political and Social Science, xxvii, 202-206 (1906).  
*In* The relation of the American municipalities to the gas and electric light supply: a symposium.  
Very brief description of the services.

— The movement for municipal ownership in Chicago. Annals of the American Academy of Political and Social Science, xxvii, 72-90 (1906).  
Somewhat detailed historical account.

*Chicago* — continued.

HEILMAN, R. E. The Chicago subway problem. *Journal of Political Economy*, xxii, 992–1005 (1914).

A discussion of recent subway franchise history in Chicago.

— Chicago traction: a study of the efforts of the public to secure good service. *Publications, American Economic Association*, 3d series, ix, 313–443 (1908).

Thorough historical study of Chicago traction, franchises and the municipal ownership movement.

HODGE, W. H. The Commonwealth Edison company. *Public Service*, iv, 131–144 (1908).

Description, illustrated with photographs.

HOTCHKISS, W. E. Chicago traction: a study in political evolution. *Annals of the American Academy of Political and Social Science*, xxviii, 385–404 (1906).

— Recent phases of Chicago's transportation problem. *Annals of the American Academy of Political and Social Science*, xxxi, 85–95 (1908).

Franchise history in 1907. Supplementary to his "Chicago traction: a study in political evolution."

LAMB, L. A. The status of the Chicago traction problem. *Electric Railway Review*, xvi, 390–392 (1906).

Current history, based on a recent court decision.

MALTBIE, M. R. (ed.) The street railways of Chicago. Chicago ? 1901. 160 pp.

Reprinted from *Municipal Affairs*.

Analysis of financial operations. M. R. Maltbie. 7–49.

Accountant's report. E. F. Bard. 50–160.

— The street railways of Chicago: analysis of financial operations. *Municipal Affairs*, v, 441–483 (1901).

MARSTON, GLENN. Gas rates and politics in Chicago. *Public Service*, x, 72–74 (1911).

MEAD, D. W. The cost of furnishing water with reference to rates and rate making. *Proc., American Waterworks Association*, xxx, 92–96 (1910).

Discussion: pp. 96–109. A brief comparison and discussion of the water rates of private and municipal supply in Chicago, 1901–1902; includes tables of statistics.

*Chicago* — continued.

MILLIS, H. A. The present street railway situation in Chicago.

Annals of the American Academy of Political and Social Science, xx, 356–367 (1902).

Chiefly franchise history.

OSSOSKI, SIDNEY. The basis of valuation in case of municipal purchase of street railways. Electric Railway Journal, xxxvi, 999–1000 (1910).

Procedure at Cleveland and Chicago used for illustration.

— The Chicago plan of street railway supervision and control.

Electric Railway Journal, xxxvi, 218–220 (1910).

A critical account of the franchise and ordinance provisions.

PALMER, RAY. Municipal lighting rates. Annals of the American Academy of Political and Social Science, lvii, 33–44 (1915).

Discussion of how to compare electric lighting rates of different cities; includes tables of electric rates in Chicago, with some discussion.

— Street lighting rates and cost factors. American City, xi, 462–466 (1914).

Abstract of his "Municipal lighting rates."

REX, FREDERIC. Chicago. Annals of the American Academy of Political and Social Science, xxx, 557–562 (1907).

*In* The relation of the municipality to the water supply: a symposium. Brief historical and descriptive account of the water service.

SIKES, G. C. Chicago's struggle for freedom from traction rule. Outlook, lxxxii, 748–753 (1906).

— The relation of Chicago to public service corporations.

Annals of the American Academy of Political and Social Science, xxxi, 155–160 (1908).

Brief account of the services.

TOLMAN, E. B. Chicago's traction question. World Today, ix, 1181–1187 (1905); x, 637–645 (1906).

A full popular account of traction franchise history in Chicago; illustrated with photographs.

WESTON, GEORGE. Supervising engineers and street railway service: the value of a board of supervising engineers in se-

*Chicago* — continued.

curing efficient street railway service. *Annals of the American Academy of Political and Social Science*, xxxvii, 191-202 (1911).

Chiefly historical.

WILCOX, D. F. How the Chicago and Cleveland street railway settlements are working out. *National Municipal Review*, i, 630-638 (1912).

A good analysis.

— — — Engineering News, lxviii, 526-529 (1912).

— — The street railway settlement franchises of Chicago and Cleveland. (*In* Municipal franchises. New York, 1911.) ii, 141-191.

A thorough historical study.

*Galena*

THOMPSON, H. A. Galena's experience with ownership. *Public Service*, v, 91-92 (1908).

*Galesburg*

HODGE, W. H. Ownership that does not pay. *Public Service*, iv, 99-104 (1908).

Description and analysis of results; with photographs.

*Lake Forest*

ALVORD, J. W. A coöperative waterworks franchise. *Proc., American Waterworks Association*, xxx, 110-118 (1910).

Discussion: pp. 118-122. An account of the main features of an ordinance in Lake Forest. A part of the net profits go to a sinking fund for municipal purchase of the property.

*Peoria*

PERRY, H. S. A city that sold its waterworks. *Public Service*, iv, 21 (1908).

A popular historical sketch of the plant under municipal and private ownership.

*Springfield*

SMITH, J. E. Experiments at Springfield, Ill. *Public Service*, i, 104-106 (1906).

## INDIANA

DUNCAN, T. C. Purposes and methods of the Indiana utility act. Indianapolis, 1913. 17 pp.

GORDON, F. G. R. Municipal ownership failures in Indiana. Concerning Municipal Ownership, ix, 127-128 (1916). Madison, Marion and Muncie.

MCREYNOLDS, T. C. State supervision of public utilities. Public Service, ix, 105-108 (1910).

Argument in favor of a public service commission for Indiana.

WHERRY, W. M., Jr. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania and West Virginia. ?, 1913. 91 pp.

Each law analyzed separately by sections.

*Crawfordsville*

BROWN, C. C. Some new provisions in a proposed franchise for a municipal public service corporation. Proc., American Society of Municipal Improvements, 1909: 274-288.

A reprint of the franchise ordinance, with some discussion.

*Fort Wayne*

WILLIAMS, F. H. Fort Wayne's municipal lighting plant. Municipal Journal and Engineer, xxvi, 285-289 (1909). A description, illustrated with photographs.

*Indianapolis*

BROWN, C. C. How a private gas company at Indianapolis is controlled in the public interest. Engineering News, lx, 674-675 (1908).

Abstract.

— A modern municipal franchise. Proc., American Society of Municipal Improvements, 1908: 20-26.  
On the franchise of the Citizens' gas company.

— — Municipal Engineering, xxxv, 306-309 (1908).

Abstract.

FORREST, J. D. A new plan for the control of quasi-public works. American Journal of Sociology, iii, 837-847 (1898).

Discussion of the plan of A. F. Potts for a gas trust managed in the interests of the public. Reviews the history of its application in Indianapolis.

*Indianapolis* — continued.

GOODRICH, J. P. The public welfare and the holding company. *Annals of the American Academy of Political and Social Science*, lvii, 323-334 (1915). Includes, for illustration, history in Indianapolis.

JONES, W. H. Public services of Indianapolis. *Public Service*, i, 41-51 (1906). Each kind of utility service described separately, with photographs.

McMATH, T. B. Description of the street railway system, including interurban terminal plants. *Proc., American Society of Municipal Improvements*, 1903: 105-109.

POTTS, A. F. A successful substitute for municipal ownership. *Municipal Engineering*, xiv, 181-187 (1898). An account of the Consumers' gas trust of Indianapolis.

— — — *American Monthly Review of Reviews*, xx, 576-578 (1899).

*Knightstown*

SUTTON, W. E. Ownership in a small community. *Public Service*, iii, 133-134 (1907). On municipal ownership of electric light and waterworks plants in Knightstown.

*Logansport*

GARDNER, H. M. Discord in municipal ownership. *Public Service*, v, 40-41 (1908). Current history.

— — — Electric plant of Logansport, Ind. *Public Service*, ii, 77-80 (1907). A brief sketch of municipal ownership history.

LOFTUS, D. J. Logansport, Indiana, electric light department. *Proc., National Conference for Good City Government*, 1906: 254-256. Very brief historical sketch.

IOWA

DIXON, F. H. State railroad control: with a history of its development in Iowa. New York, 1896? 250 pp. An excellent study of the history of railroad legislation and commission regulation in Iowa; of interest for all public utilities.

DOWNEY, E. H. Regulation of urban utilities in Iowa. Iowa City, 1912. 174 pp.

Iowa applied history series, i, no. 3.

Ch. i. The need of regulating urban utilities.

    ii. The failure of local regulation.

    iii. The appropriate organ of state regulation.

    iv. Public service commissions in the United States.

    v. Urban utility regulation in Iowa.

    vi. Suggestions for effective utility regulation.

An excellent, thoroughly annotated study of the general principles of public utility regulation, regulation in the United States and Iowa's experience.

### *Cedar Rapids*

LAZELL, F. J. Municipalizing a water plant. *Public Service*, iii, 135-136 (1907).

### *Des Moines*

HANNA, J. R. Des Moines' street railway franchise. *Utilities Magazine*, i, no. 6, 25-26 (1916).

On franchise litigation.

JENKINS, W. C. Des Moines' utilities. *Public Service*, xvi, 85-93 (1914).

History of ten years' litigation, illustrated with photographs.

### *Dubuque*

MCLEAN, CHARLES. Dubuque's public ownership predicament. *Public Service*, i, 53-54 (1906).

### *Iowa City*

DUNLAP, J. H. The water meter rates of Iowa City. *Water and Gas Review*, xxvi, 20-23 (1916).

Abstract. The results of an investigation for the city council of a proposed rate schedule; with tables.

### *Waterloo*

MARSTON, A. The valuation for city purchase of the property of the Waterloo (Ia.) waterworks co. *Engineering News*, lxi, 424-425 (1909).

Includes tables of data.

### KANSAS

FERRIN, A. W. Blue sky legislation. *Moody's Magazine*, xv, 221-226 (1913).

A popular but interesting discussion of the Kansas law; including a proposed model bill.

#### *Kansas City*

MORGAN, P. W. Municipal water and light plant of Kansas City, Kansas. *Municipal Engineering*, xlviii, 284-285 (1915). History and some discussion; illustrated with photographs.

WOOTAN, J. B. Kansas City, Kansas, m. o. light plant is crowding Cleveland as prize failure. *Public Service*, xx, 38-40 (1916).

Analysis of operating results.

#### *Sylvan Grove*

SENG, A. W. Selling water at a profit. *Municipal Engineering*, xliv, 580-582 (1913).

A description of the Sylvan Grove municipal water and light plant.

#### *Topeka*

SMUCKER, L. L. Topeka's unsuccessful lighting plant. *Public Service*, i, 79-80 (1906).

### KENTUCKY

#### *Henderson*

DANNETTELL, G. W. Gas ownership in a Kentucky city. *Public Service*, iii, 77-79 (1907).

### LOUISIANA

#### *Donaldsonville*

IVENS, E. M. Donaldsonville, La., electric light and water-works plant. *Power*, xxxix, 432-435 (1914).

An engineering description, illustrated with photographs and diagrams.

#### *New Orleans*

DODGE, L. A. The public belt railroad of New Orleans. *American City*, v, 328-331 (1911).

A brief account, with one photograph.

*New Orleans*—continued.

EARL, G. G. Water rates. Proc., American Waterworks Association, xxxi, 173-189 (1911).

Discussion: pp. 189-216. A somewhat elementary discussion of principles, with an analysis of rates for New Orleans for illustration.

McLOUGHLIN, J. J. New Orleans. Annals of the American Academy of Political and Social Science, xxvii, 211-213 (1906).

*In* The relation of the American municipalities to the gas and electric light supply: a symposium.

Very brief description of the services.

— — — Annals of the American Academy of Political and Social Science, xxx, 580-582 (1907).

*In* The relation of the municipality to the water supply: a symposium. Very brief historical and descriptive account of the water service.

WOLFF, SOLOMON. Public service corporations of New Orleans.

Annals of the American Academy of Political and Social Science, xxxi, 96-104 (1908).

Descriptive.

### *Opelousas*

JONES, A. C. Light and water plant of Opelousas, Louisiana. Municipal Engineering, xlvi, 202-206 (1914).

A popular historical account of operation and management difficulties; with one photograph.

— Opelousas' municipal lighting plant. Power, xli, 41-42 (1915).

Description of the plant, illustrated with photographs.

## MARYLAND

### *Baltimore*

BURNETT, DOUGLASS. Differential gas rates in Baltimore. Gas Age, xxxvii, 137-140 (1916).

Semi-technical; with a number of charts.

FORD, H. J. Baltimore. Annals of the American Academy of Political and Social Science, xxx, 567-569 (1907).

*In* The relation of the municipality to the water supply: a symposium. Brief historical and descriptive account of the water service.

## MASSACHUSETTS

ADAMS, A. D. Cost of light in municipal and private gas and electric plants. *Municipal Engineering*, xxiii, 160-164 (1902). A statistical comparison of the cost in Massachusetts.

— Equipment and operation of municipal electric light plants in Massachusetts. *Municipal Engineering*, xxiii, 434-436 (1902).

An historical statistical study.

— Gas versus electricity. *Electrical World and Engineer*, xxxviii, 676-678 (1901).

Discussion of the relative amounts of business done by gas and electric companies. Massachusetts used for illustration; includes tables and a chart.

— Investments and earnings of municipal electric plants. *Municipal Engineering*, xxiv, 344-348 (1903).

A comparison of municipal and private plants in Massachusetts, with tables of statistics.

—, and PRITCHARD, C. F. Massachusetts electricity works. (*In National Civic Federation. Municipal and private operation of public utilities. New York, 1907.*) Pt. II, vol. i, 909-1213.

— Municipal gas and electric plants in Massachusetts. *Journal of Political Economy*, x, 214-229 (1902).

Historical and analytical treatment; with tables.

— — — Political Science Quarterly, xvii, 247-255 (1902).

— The New York and Massachusetts commissions of gas and electricity. *Electrical World and Engineer*, xlvi, 97-98 (1905).

— Regulation of electric rates in Massachusetts. *Electrical World and Engineer*, xlvi, 391-392, 442-443, 484-486 (1905). Gives the facts and rulings in various cases before the commission, without discussion.

— Regulation of gas and electric rates in Massachusetts. *Electrical World and Engineer*, xlvi, 310-311, 348-349 (1905).

Gives the facts and rulings in various gas rate cases before the commission, without discussion.

ALLEN, W. S. Street railway franchises in Massachusetts. *Annals of the American Academy of Political and Social Science*, xxvii, 91-110 (1906).  
Detailed historical account.

— Street railways: development of street railways in the commonwealth of Massachusetts. ?, 1899 ? 26 pp.

BATTEY, C. T. Electric freight in Massachusetts. *Aera*, ii, 236-240 (1913).  
An historical sketch, illustrated with photographs.

BRANDEIS, L. D. The experience of Massachusetts in street railways. *Municipal Affairs*, vi, 721-729 (1903).

BULLOCK, C. J. Control of the capitalization of public service corporations in Massachusetts. *Publications, American Economic Association*, 3d series, x, 384-415 (1909).  
Discussion: pp. 415-430. A good description of the Massachusetts method, and the reasons therefor.

CALKINS, GROSVENOR. The Massachusetts anti-stock-watering law. *Quarterly Journal of Economics*, xxii, 640-645 (1908).  
A brief account of the act of 1908.

EASTMAN, J. B. The public service commission of Massachusetts. *Quarterly Journal of Economics*, xxvii, 699-707 (1913).  
An historical discussion, with an account of the powers of the new commission.

— The public utilities commissions of Massachusetts. *Proc., National Conference for Good City Government*, 1908: 288-307.  
A discussion of the commissions and their work.

— (In KING, C. L. *The regulation of municipal utilities*. New York, 1912.) 276-295.  
Revised reprint.

FRIEDMAN, H. G. The taxation of corporations in Massachusetts. *Columbia University Studies in History, Economics and Public Law*, xxvii, 405-577 (1907).  
Taxation of public service corporations: pp. 502-535.

GRAY, J. H. Competition and capitalization as controlled by the Massachusetts gas commission. *Quarterly Journal of Economics*, xv, 254-276 (1901).

GRAY, J. H. The difficulties of control as illustrated in the history of gas companies. *Annals of the American Academy of Political and Social Science*, 1900: supplement, 33-59.

Mainly a discussion of the history of Massachusetts gas companies and their combination.

— The gas commission of Massachusetts. *Quarterly Journal of Economics*, xiv, 509-536 (1900).

Historical study.

McGRATH, D. J. Actual returns in the past. *Aera*, iv, 714-722 (1915).

*In* Topical discussion on rate of return on electric railway capital. History in Massachusetts, with diagrams. An interesting study.

— Return on Massachusetts investment. *Electric Railway Journal*, xlvi, 256-259 (1916).

Abstract; illustrated with charts.

MARKS, W. D. Capitalization, assets and profits of Massachusetts gas companies. (*In Practical rate making and appraisement. South Hadley*, 1914 ?) 252-269.

A statistical study, with tables.

— The cost of electricity. *Electrical World*, lvi, 265-269 (1910).

Supplementary to his "The price of electricity."

— The price of electricity. *Electrical World*, liv, 555-559 (1909).

An interesting technical argument for the use of the Marks sliding scale; includes tables and charts of Massachusetts experience, and formulae.

RIPLEY, W. Z. The capitalization of public service corporations. *Quarterly Journal of Economics*, xv, 106-137 (1900).

A thorough, fully annotated study; discusses railroads only, but is of some interest for other utilities. Considerable attention is paid to practice in Massachusetts.

SCOVELL, C. H. A report on the policies and administrative work of the commissions regulating public service companies in Massachusetts. Boston, 1911. 45 pp.

Report to the governor of Massachusetts.

Chiefly of historical interest. The writer recommends a single public utility commission to secure uniformity and more expert service.

WARREN, B. W. The state and the street railway: one successful solution of the problem of their mutual relations. *Green Bag*, xvii, 33-42 (1905).

An historical and descriptive account of the Massachusetts system of traction regulation.

WRIGHTINGTON, S. R. Taxation of "guaranteed" stock in Massachusetts. *Green Bag*, xxiv, 8-17 (1912).

An account of an attempt of the Boston and Maine railroad to dodge bond taxation by issuing "guaranteed stock."

#### *Attleborough*

BECKHARD, BRUNO. Attleborough, an object lesson. *Arena*, xl, 100-104 (1908).

A popular article, composed chiefly of quotations from the current reports.

#### *Boston*

ADAMS, A. D. The first electric light plant in Boston. *Electrical World and Engineer*, xxxvi, 954 (1900).

Descriptive.

BRANDEIS, L. D. How Boston solved the gas problem. *American Review of Reviews*, xxxvi, 594-598 (1907).

On the application of the sliding scale to the Boston gas companies.

BRUSH, M. C. A great city system. *Aera*, ii, 36-45 (1913).

An account of the history and development of the Boston elevated railway company, illustrated with photographs.

CONANT, W. B. Municipal water plant derives income from water power. *Municipal Engineering*, xl ix, 117 (1915).

An account of the sale of power from the Sudbury station of the Boston metropolitan waterworks.

GRAY, J. H. The control of quasi-public enterprises. Boston, 1906. 20 pp.

An historical account of the gas supply in Boston; popular.

— The gas supply of Boston. *Quarterly Journal of Economics*, xii, 419-446 (1898); xiii, 15-44 (1898); xiii, 292-313 (1899); xiv, 87-120 (1899).

An historical study.

*Boston* — continued.

HAMLEN, E. W. Glasgow and its municipal tramways. Moody's Magazine, ii, 652-655 (1906).

*In* Municipal ownership and operation: symposium.

A brief comparison of Glasgow and Boston traction, favoring private ownership.

HARTWELL, E. M. Boston. Annals of the American Academy of Political and Social Science, xxvii, 207-208 (1906).

*In* The relation of the American municipalities to the gas and electric light supply: a symposium.

Very brief description of the services.

HUNGERFORD, EDWARD. Rapid transit in Boston and vicinity. Electric Railway Review, xvii, 709-712 (1907).

An engineering description with discussion of plans for future extensions; illustrated with photographs and a map.

MOORE, L. E. The Cambridge subway. Engineering News, lxvi, 187-195 (1912).

Description of engineering features, illustrated with photographs.

PINANSKI, A. E. The street railway system of metropolitan Boston. New York, 1908. 58 pp.  
History of traction franchises; a thorough study.

RICHARDS, J. L. The Boston consolidated gas company: its relation to the public, its employees and investors. Annals of the American Academy of Political and Social Science, xxxi, 59-65 (1908).

A brief historical account; including a table of the prices paid for gas in Boston from 1828 to 1907.

— History of the gas industry of Boston. Public Service, x, 47-48 (1911).

Discusses chiefly the improvement in relations with the public under new management.

WHITTEN, R. H. The Boston sliding scale plan. (*In* Regulation of public service companies in Great Britain. New York, 1914.) 186-203.

WILCOX, D. F. Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities. New York, 1910-1911. 2 vols.

The sliding scale, Boston, i, pp. 57-58, 560-564.

*Boston* — continued.

WINSLOW, WILLARD. Boston's new subway. *Municipal Affairs*, v, 427-432 (1901).

Popular historical account of the municipal subway.

WOODS, R. A., and EASTMAN, J. B. The Boston franchise contest. *Outlook*, lxxxii, 835-841 (1906).

WRIGHTINGTON, E. N. The sliding scale method of regulating public service corporations. *Proc., National Conference for Good City Government*, 1910: 103-108.

A popular account of the sliding scale applied to Boston gas companies.

— The sliding scale method of regulation as applied to gas companies in Massachusetts. (*In* KING, C. L. *The regulation of municipal utilities*. New York, 1912.) 99-102.

Revised reprint.

*Great Barrington*

ADAMS, A. D. A large lighting load in a small town. *Electric Age*, xxxvi, 445-446 (1906).

An historical sketch of electric lighting in Great Barrington.

*Holyoke*

ADAMS, A. D. The Holyoke case. *Quarterly Journal of Economics*, xvii, 643-668 (1903).

The writer asserts that municipal ownership was forced on Holyoke by a court decision, and that as a result an unreasonably high purchase price was paid.

MARSTON, GLENN. Holyoke's municipal lighting finances. *Concerning Municipal Ownership*, iii, 87-89 (1908).

TIGHE, J. L. Water consumption, waste and meter rates. *Proc., American Waterworks Association*, xxviii, 69-84 (1907).

Discussion: pp. 85-103. On the experience of Holyoke; with tables and charts.

*North Brookfield*

POWELL, F. W. Two experiments in public ownership of steam railroads. *Quarterly Journal of Economics*, xxiii, 137-150 (1908).

Troy, N. Y., and North Brookfield, Mass.

The writer states that the first was a failure; the second a success.

*Spencer*

PLATTNER, WILLIAM. Spencer's modern street lighting contract.  
Utilities Magazine, i, no. 5, 28-29 (1916).

*Taunton*

ADAMS, A. D. The largest municipal electric plant in New England. Electrical Review and Western Electrician, xlvi, 363-367 (1905).  
Engineering description, illustrated with photographs and diagrams.

*Worcester*

MARKS, W. D. The law of demand for electricity: reduction of price increases profits. (*In* Practical rate making and appraisement. South Hadley, 1914?) 200-214.  
Chiefly an analysis of electric rates in Worcester.

MICHIGAN

SHIELDS, R. H. Railroad taxation problems. State and Local Taxation, 1910: 231-241.

A good discussion of problems in Michigan, with suggested remedies. Of interest for all public utilities.

— Railway taxation. State and Local Taxation, 1908: 263-269.

Extracts from paper before Minnesota academy of social science.

— The taxation of corporate property as seen in the taxation of Michigan railroads. Proc., Minnesota Academy of Social Science, i, 40-58 (1907).

An historical account, of some general interest.

WILLIAMS, W. H. Railway capital and values. Railroad Age Gazette, xlvi, 761-762, 805-808, 845-846, 903-905 (1909).  
On the valuation of Michigan railroads.

*Detroit*

BEMIS, E. W. Detroit's efforts to own her street railways. Municipal Affairs, iii, 473-490 (1899).

DALY, W. M. Public lighting plant of Detroit, Mich. Proc., American Society of Municipal Improvements, 1907: 109-115.

A brief historical sketch and analysis of results

*Detroit*—continued.

DAVIS, R. K. The street railway situation in Detroit, Mich. Proc., American Society of Municipal Improvements, 1906: 157-163.

An historical sketch.

DEACON, W. G. Detroit politics halts development. Public Service, xii, 125-128 (1912).

Traction history in Detroit.

DE GONZEGA, A. Detroit's street railway problem. Moody's Magazine, ii, 390-392 (1906).

Comments on the existing situation.

FAIRLIE, J. A. Municipal electric lighting in Detroit. Municipal Affairs, iv, 606-613 (1900).

Brief statistical analysis and comparison with other cities, favorable to municipal ownership under the existing conditions.

— (In Essays in municipal administration. New York, 1908.) 219-229.

Revised reprint.

FENKELL, G. H. Description of Detroit waterworks. Proc., Central States Waterworks Association, 1912: 128-135.

A popular account, with an historical sketch.

FULLERTON, IRWIN. Do low fares increase riding? Electric Railway Journal, xlivi, 770 (1914).

An account of a fare reduction experiment made by the Detroit united railway company.

HAYDEN, J. C. The street railway situation in Detroit. Utilities Magazine, i, no. 5, 31-32 (1916).

INGRAM, F. F. Municipal lighting in Detroit. Municipal Affairs, vi, 823-825 (1903).

— Municipal operation in Detroit. Proc., National Conference for Good City Government, 1906: 249-253.

Brief analysis of the results of the municipal lighting plant, the writer favoring municipalization.

— Should the people or the corporations light our cities? Arena, xxx, 392-400 (1903).

An argument for municipal ownership, illustrated by a comparison of municipal and private management in Detroit.

*Detroit* — continued.

LEAKE, PAUL. The street railway situation in Detroit. Proc., National Conference for Good City Government, 1910: 120-141.

A good review of franchise history and terms.

LOCKWOOD, J. E. Analysis of municipal electric lighting in Detroit. Municipal Affairs, vi, 825-834 (1903).

A detailed statistical analysis, the conclusions being favorable to municipal ownership.

MOORE, CHARLES. Electric lighting in the city of Detroit. Publications, American Economic Association, ii, 539-550 (1888).

*In* The relation of modern municipalities to quasi-public works. Historical.

WILCOX, D. F. The control of public service corporations in Detroit. Annals of the American Academy of Political and Social Science, xxxi, 42-58 (1908).

Largely historical, with considerable franchise discussion.

— Detroit. Annals of the American Academy of Political and Social Science, xxx, 582-585 (1907).

*In* The relation of the municipality to the water supply: a symposium. Very brief historical and descriptive account of the water service.

WILSON, THOMAS. Detroit's municipal lighting plant. Power, xl, 832-835 (1914).

A description of the plant, with an historical sketch and operating statistics; illustrated with a photograph and diagram.

*Grand Rapids*

FOOTE, MARK. Grand Rapids' municipal water plant. Public Service, ii, 37-40 (1907).

An historical sketch; the writer opposes municipal ownership.

— Grand Rapids to quit city lighting. Public Service, ii, 136-137 (1907).

A brief historical sketch.

— Is a five cent street car fare equitable? Public Service, ix, 139-141 (1910).

Experience in Grand Rapids.

*Grand Rapids*—continued.

WILCOX, D. F. Grand Rapids. *Annals of the American Academy of Political and Social Science*, xxvii, 220-222 (1906).

*In* The relation of the American municipalities to the gas and electric light supply: a symposium.

Very brief description of the services.

*Holland*

GONDEN, H. J. Gas at less than cost. *Public Service*, xi, 185-186 (1911).

An account of conditions in Holland, where the rates allowed under the franchise are claimed to be unprofitable.

*Kalamazoo*

NEWBIGGING, WILLIAM. The Kalamazoo situation. *American Gas Light Journal*, ciii, 38-39 (1915).

Abstract of a report to the city of Kalamazoo.

A brief analysis of operating results, with tables of statistics.

WILSON, THOMAS. Kalamazoo municipal plant. *Power*, xli, 218-224 (1915).

An engineering description of the municipal street lighting plant, with photographs and diagrams.

*Ypsilanti*

HATCH, W. B. A successful fight for a municipal gas plant. *American City*, xii, 49-52 (1915).

## MINNESOTA

GESELL, G. A. Minnesota public utility rates: gas, electric, water. Minneapolis, 1914. 254 pp.

University of Minnesota, Current problems, no. 3.  
By cities, for each service.

JONES, S. P. The advisability of a state public utilities commission for Minnesota. *Proc., Minnesota Academy of Social Science*, vi, 65-77 (1912).

The writer favors local commissions for the large cities and a state commission having jurisdiction only over rural communities.

*Duluth*

CASE, L. N. Municipal operation in Duluth, Minn. Proc., National Conference for Good City Government, 1906: 244-248.

A brief discussion of the history and results of operation of the municipal water and gas plants, the writer favoring municipal ownership.

JOERNS, W. G. Duluth. Annals of the American Academy of Political and Social Science, xxvii, 224-233 (1906).

*In* The relation of the American municipalities to the gas and electric light supply: a symposium.

— — — Annals of the American Academy of Political and Social Science, xxx, 590-592 (1907).

*In* The relation of the municipality to the water supply: a symposium. Very brief historical and descriptive account of the water service.

*Minneapolis*

DEACON, W. G. Electric rates for Minneapolis. Public Service, v, 107-110 (1908).

History of the controversy.

JONES, S. P. Lower gas and electric rates in Minneapolis. Utilities Magazine, i, no. 5, 29-30 (1916).

A very brief account of a current reduction in rates.

— Minneapolis gas settlement. Proc., National Conference for Good City Government, 1910: 142-155.

A popular historical account.

— The Minneapolis gas settlement: a typical struggle for a city's rights. (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 56-72.  
Revised reprint.

MARKS, W. D. Recapitulation of report upon the fair and reasonable price of a 6.6 ampere magnetite arc light per year. (*In* Practical rate making and appraisement. South Hadley, 1914?) 60-113.

A detailed study of street lighting rates in Minneapolis, with tables of statistics.

WILCOX, D. F. Minneapolis gas settlement ordinances. (*In* Municipal franchises. New York, 1911.) ii, 811-832.

A reprint of the franchise and regulatory ordinances of 1910.

*St. Paul*

FEURTADO, R. S. The fair price of gas at St. Paul. *Public Service*, iii, 173-179 (1907).

## MISSOURI

*Kansas City*

ARNOLD, B. J. Foundation principles in valuation. *Electric Railway Journal*, xlvi, 713-719, 803-806 (1915).

Abstract.

— Foundation principles of utility valuation with special application to plans for resettlement. *Aera*, iv, 189-214 (1915).

Abstract.

— Foundation principles of utility valuation with special application to resettlement plans. *Proc., American Electric Railway Association*, 1915: 139-187.

Discussion: pp. 188-198. Notes on Kansas City traction resettlement: pp. 174-175; with charts.

COBLEIGH, C. F. Early electric railway experiments in Kansas City. *Aera*, i, 331-335 (1912).

Illustrated with two photographs.

HARZFIELD, J. A. The utilities commission of Kansas City, Missouri. (*In* KING, C. L. *The regulation of municipal utilities*. New York, 1912.) 219-230.

A brief, popular account of the commission and its work.

KEALY, P. J. The partnership provisions of the Kansas City franchise. *Electric Railway Journal*, xliv, 691-694 (1914).

KEITH, JOHN. Kansas City's waterworks fiasco. *Public Service*, i, 77-79 (1906).

A brief historical sketch, under private and municipal ownership.

MUNAGLE, F. J. The Kansas City settlement. *Aera*, iii, 19-23 (1914).

PETERS, J. W. S. Kansas City franchise fight. *Proc., National Conference for Good City Government*, 1910: 156-169.

*St. Louis*

BALDWIN, R. N. The St. Louis public service commission. (*In KING, C. L. The regulation of municipal utilities.* New York, 1912.) 231-249.

A popular account of the commission and its work.

BECKHARD, BRUNO. Municipal lighting in St. Louis. *Arena*, xxxix, 470-472 (1908).

A very brief historical sketch.

CASEY, C. C. Municipal lighting at St. Louis. *Municipal Journal and Engineer*, xxiv, 209-211 (1908).

A description of the plants, illustrated with photographs.

EISENMAYER, H. E. Graphical analysis of the St. Louis residence rates. *Electrical World*, lix, 644-645 (1912).

Highly technical and theoretical; with charts.

JENKINS, W. C. The public utilities of St. Louis. *Public Service*, xvi, 5-9 (1914).

History and description, illustrated with photographs.

SPOHRER, H. H. Electric rates. *Electrical Review and Western Electrician*, lx, 747-748 (1912).

On a new schedule of electric rates adopted by the Union electric light and power company of St. Louis, with some discussion; technical.

**NEBRASKA**

HURD, E. C. The organization for and methods and results of physical valuation in Nebraska. *Engineering and Contracting*, xxxvi, 694-696 (1911).

A general discussion, of little other than historical interest.

— — — Engineering and Contracting, xxxviii, 136-138 (1912).

*Fremont*

BREMERS, H. J., Jr. Municipal light and water plant at Fremont, Neb. *Municipal Engineering*, lxv, 119-121 (1913).

A description of the plant, with one photograph.

*Omaha*

HODGE, W. H. Public services of Omaha. *Public Service*, i, 3-14 (1906).

Each kind of utility service described separately, with photographs.

*Omaha* — continued.

MAYO, E. W. Omaha's experience. *Moody's Magazine*, ii, 659–662 (1906).

*In Municipal ownership and operation: symposium.*

History of municipal ownership and accompanying litigation; opposes municipalization.

#### NEW JERSEY

BERGEN, FRANK. Restrictive legislation against public service corporations in New Jersey. *Annals of the American Academy of Political and Social Science*, xxxi, 125–136 (1908).

A discussion of current legislation.

DANIELS, W. M. "Law that has teeth." *Public Service Regulation*, i, 31–32 (1912).

An outline of the provisions of the public utility act.

HANSEL, CHARLES. The valuation of railroads in New Jersey. *Engineering Record*, lxiii, 594–599 (1911).

Discusses the valuation of railroads for the purpose of taxation, with brief reference to the experience of other states. Of some interest for municipal utilities.

#### NEW YORK

ADAMS, A. D. The New York and Massachusetts commissions of gas and electricity. *Electrical World and Engineer*, xlvi, 97–98 (1905).

ANDERSON, WILLIAM. The work of public service commissions, with special reference to the New York commissions. Minneapolis, 1913. 44 pp.

University of Minnesota, Current problems series, no. 1. Elementary.

BLAKE, H. W. The problem of the five cent fare. *Electric Railway Journal*, xxxvi, 23–27 (1910).

On the need for higher fares in New York state; with tables and one chart.

— — — Electric Traction Weekly, vi, 730–734 (1910).

BRUÈRE, HENRY. Public utilities regulation in New York. *Annals of the American Academy of Political and Social Science*, xxxi, 1–17 (1908).

CAWCROFT, ERNEST. The constitutional convention and New York's fiscal policy. *Moody's Magazine*, xviii, 183-186 (1915).

On the municipal powers and constitutional changes needed in New York state to aid municipal ownership.

COLEMAN, G. S. Special franchise taxation in New York. *State and Local Taxation*, 1907: 649-654.

An analysis of the law and its effect.

EDWARDS, H. M. Regulated electric light accounting. *Proc., National Electric Light Association*, 1912: vol. ii, 106-137.

Discussion: pp. 137-148. A critical analysis of the accounting system prescribed by the New York commission. Technical.

FAY, E. P. Assessment and collection of school taxes on property of public service corporations. *Proc., New York State Conference on Taxation*, 1916: 128-135.

On the existing confusion in New York state, and suggested remedies.

FOOTE, A. R. Regulation of public utilities: a comparison of the New York and Wisconsin public utility bills. Columbus, 1911. 36 pp.

A detailed comparison of the various clauses; with a short bibliography.

FORD, F. R. The theory of street railway rate regulation as developed in the Coney Island fare case. *Proc., American Street and Interurban Railway Association*, 1910: 159-168. Discussion: pp. 169-186.

— — — *Electric Railway Journal*, xxxvi, 752-755 (1910).

Abstract.

GRANT, G. R. The New York public service commission for the second district. (*In KING, C. L. The regulation of municipal utilities*. New York, 1912.) 326-341.

Elementary.

HALL, B. E. Administrative difficulties of the special franchise tax law. *Proc., New York State Conference on Taxation*, 1911: 177-184.

HOWLAND, H. J. A year of "government by commission." *Outlook*, xc, 483-490 (1908).

A popular, but interesting account of the commissions' work, with answers to arguments of their opponents.

HUNTER, C. F. Commission's electrical testing outfit. *Public Service Regulation*, i, 333-335 (1912).  
Description of the testing equipment of the New York public service commission for the second district, illustrated with photographs.

IVINS, W. M., and MASON, H. D. The control of public utilities: in the form of an annotation of the public service commissions law of the state of New York, and covering all important American cases, together with the text of the federal interstate commerce act and the rapid transit act of New York, with elaborate indexes of the same and numerous comparative notes and cross references to parallel provisions in the several acts. New York, 1908. 1149 pp.  
A very thorough legal work.

KENNEDY, J. S. The New York public service commissions. *Forum*, xlviii, 584-595 (1912).

LAPP, J. A. Public utilities — control. *American Political Science Review*, i, 626-638 (1907).  
Analysis and comparison of the New York and Wisconsin commission laws.

LEONARD, C. F. Gas service regulation in New York. *Public Service Regulation*, i, 455-458 (1912).  
Description of the testing equipment and methods of the New York public service commission for the second district, illustrated with photographs.

MCCLELLAN, WILLIAM. Diverted efforts of commissions. *American Gas Light Journal*, civ, 118-119 (1916).  
The writer asserts that failure of the New York commissions to properly regulate rates and service has been due to their having too many other duties.

MALTBIE, M. R. The fruits of public regulation in New York. *Annals of the American Academy of Political and Social Science*, xxxvii, 170-190 (1911).  
On the work of the commission, and the service and other improvements resulting.

MEAD, E. S. The public service commission and the investor. *Lippincott's Monthly Magazine*, xc, 764-768 (1912).  
A popular discussion of the control of capitalization by the New York commissions.

OSBORNE, T. M. The New York public service commissions.  
Proc., National Conference for Good City Government, 1908: 269-287.  
A discussion of the provisions of the law.

— The public service commissions law of New York. Atlantic Monthly, ci, 544-554 (1908).

— The public service commissions law of New York state. Proc., American Political Science Association, iv, 287-304 (1907).  
Discussion: pp. 324-335. An analysis and discussion of the act.

— The public utility law of New York. (*In KING, C. L. The regulation of municipal utilities. New York, 1912.*) 318-326.  
Revised and reprinted from Proc., National Conference for Good City Government.

POLLOCK, H. M. The public service commissions of the state of New York. Annals of the American Academy of Political and Social Science, xxxi, 115-124 (1908).

STOWE, L. B. The public service companies and the people. Outlook, xcv, 515-521 (1910).

WHITNEY, F. N. Centralized assessment of public utilities in New York. Proc., New York State Conference on Taxation, 1915: 191-201.  
A discussion of the tax laws now in force and the need of reform.

WHITNEY, T. H. The New York City public service commission. Proc., American Political Science Association, v, 96-110 (1908).  
An excellent account of the provisions of the act.

— New York public utilities. Public Service Regulation, i, 127-128 (1912).

— The public service commissions act of New York. Green Bag, xix, 412-424 (1907).  
A detailed analysis of the act.

WHITTEN, R. H. The work of the public service commission for the first district, New York. (*In KING, C. L. The regulation of municipal utilities. New York, 1912.*) 341-377.  
Elementary.

WILCOX, D. F. The crisis in public service regulation in New York. *National Municipal Review*, iv, 547-563 (1915).

A very popular historical account of the appointments to the first district commission. Interesting because of showing the effect of politics on the efficiency and success of commissions.

— Needed changes in the public service laws of New York. *Utilities Magazine*, i, no. 2, 14-16 (1915).

An excellent brief discussion of the division of functions between state and local regulation.

— Public service commission situation in New York. *National Municipal Review*, v, 307-309 (1916).

A supplementary note to "The crisis in public service regulation in New York."

WILLIAMS, HARRISON. Assessment of railroads and other public service corporations. *Proc., New York State Conference on Taxation*, 1911: 185-191.

#### *Auburn*

ACKERMAN, J. W. Municipal electrical conduit system of the city of Auburn, N. Y. *Proc., American Society of Municipal Improvements*, 1907: 123-128.

A brief historical sketch, illustrated with photographs.

#### *Buffalo*

RICHARDSON, A. C. Buffalo. *Annals of the American Academy of Political and Social Science*, xxx, 571-575 (1907).

*In* The relation of the municipality to the water supply: a symposium. Brief historical and descriptive account of the water service.

#### *Camden*

PHELPS, L. F. Municipal lighting plant operated by oil engine. *Municipal Engineering*, xliv, 311-312 (1913).

#### *Elmira*

DIVEN, J. M. Special fire protection rates and regulations, Elmira, N. Y. *Proc., American Waterworks Association*, xxvii, 460-462 (1907).

Includes the schedule of rates.

New York

BLAKE, A. D. New York City's power problem. Power, xxxviii, 286-290 (1913).

A description of the Hall of records power plant, which supplies a group of municipal buildings; illustrated with photographs and a diagram.

BOWKER, R. R. The piracy of public franchises. Atlantic Monthly, lxxxviii, 463-482 (1901).

A popular historical account of franchise granting in New York City.

— — — Municipal Affairs, v, 886-904 (1901).

Reprint.

BRASHEARS, W. F. New York City's subway crisis. Public Service, x, 69-72 (1911).

Discussion of the alternative of a single system or two systems.

COLER, B. S. Shall New York own its subways? New York's debts and assets. Outlook, lxxix, 934-938 (1905).

An account of the financial obstacles to constructing great public works, with suggestions for overcoming them; popular.

See also R. F. Cutting, "Shall New York own its subways?"

CUTTING, R. F. Shall New York own its subways? A calm view of the rapid transit situation. Outlook, lxxix, 931-934 (1905).

A brief historical sketch of the building of the New York subways, and a consideration of the possibility of municipal operation of future subways; popular.

See also B. S. Coler, "Shall New York own its subways?"

FLOY, HENRY. Appraisals of public utility properties in greater New York. (*In* Valuation of public utility properties. New York, 1912.) 218-232.

Composed largely of tables of valuation results, taken from the reports of the appraisals.

FOOTE, A. R. No government should operate an industry. Municipal Affairs, i, 245-289 (1897).

A reply to E. M. Grout, "New York City should own the gas supply."

FOSTER, ROGER. The taxation of the elevated railroads in the city of New York. New York, 1883. 61 pp.

Largely composed of quotations from reports and decisions.

GAYNOR, W. J. New York's subway policy. Municipal Affairs, v, 433-438 (1901).

*New York* — continued.

GROUT, E. M. New York City should own the gas supply. *Municipal Affairs*, i, 225—244 (1897).

A popular study.

For a reply, see A. R. Foote, "No government should operate an industry."

MALTBIE, M. R. Analysis of the rapid transit contracts between the city of New York and the Interborough rapid transit company, and the N. Y. municipal railway corporation. *New York?* 1913. 25 pp.

Report to the New York public service commission for the first district.

— A century of franchise history. *Municipal Affairs*, iv, 194—206 (1900).

A summary appended to Gustavus Myers, "History of public franchises in New York City."

— Franchises of electrical corporations in greater New York. *New York*, 1911. 237 pp.

Report to the New York public service commission for the first district. A very complete, classified study.

— A rapid transit policy for greater New York. *Proc., National Conference for Good City Government*, 1909: 390—402.

An historical sketch, with discussion of the work of the rapid transit commission.

— (In KING, C. L. *The regulation of municipal utilities*. *New York*, 1912.) 120—136.

Revised reprint.

MARKS, W. D. Quantity rates for electricity. (In *Practical rate making and appraisement*. South Hadley, 1914?) 114—143.

Discusses chiefly electric rates in New York City. A detailed study, with many tables and charts.

MONROE, R. G. City of New York. *Annals of the American Academy of Political and Social Science*, xxvii, 200—202 (1906).

In *The relation of the American municipalities to the gas and electric light supply: a symposium*.

Very brief description of the services.

New York—continued.

MONROE, R. G. The gas, electric light, water and street railway services in New York City. *Annals of the American Academy of Political and Social Science*, xxvii, 111-119 (1906).

Descriptive and historical account, by class of service.

MONTONY, L. G. The Ninety-sixth street power station of the Metropolitan street railway company of New York City. *Trans., American Society of Civil Engineers*, xliv, 119-142 (1900).

A technical engineering description, with diagrams and photographs.

MURPHY, J. J. Franchise grants in New York City. *Annals of the American Academy of Political and Social Science*, xxxi, 78-84 (1908).

Historical and very general.

MYERS, GUSTAVUS. History of public franchises in New York City. *Municipal Affairs*, iv, 71-193 (1900).

An extensive, popular account, arranged by classes of utilities; with tables of statistics.

Includes a long summary by M. R. Maltbie, entitled "A century of franchise history" (pp. 194-206).

NICHOLS, H. P. Progress in methods of granting franchises in New York City. Philadelphia? 1907. 24 pp.

SEABURY, SAMUEL. Municipal ownership and operation of public utilities in New York City. New York, 1905? 202 pp. Historical, by kind of utility.

WARNER, J. DEW. Should greater New York operate its street railways? Yes. *Municipal Affairs*, i, 421-457 (1897).

A popular, annotated study.

WEST, MAX. The franchises of greater New York. *Yale Review*, vi, 387-408 (1898).

A very good elementary account of franchise history in New York, with critical comments.

— Municipal franchises in New York. (*In BEMIS, E. W. Municipal monopolies*. 4th edition. New York, 1904.) 365-422.

Historical account, by class of utilities.

*New York* — continued.

WHITNEY, E. B. Public ownership in New York. *International Quarterly*, xii, 1-12 (1905).

History of the movement for municipal street railways in New York.

WILCOX, D. F. Elements of a constructive franchise policy. *Proc., National Conference for Good City Government*, 1910: 170-189.

A good account of traction franchise history in New York City and discussion of a proposed franchise policy.

— (In KING, C. L. *The regulation of municipal utilities*. New York, 1912.) 137-164.

Revised reprint.

— The New York subway contracts. *National Municipal Review*, ii, 375-391 (1913).

Franchise history and provisions.

— Report upon proposed standard form of franchise for street railroad companies. New York, 1909. 26 pp.

Report submitted to the New York public service commission for the first district.

— Street railway franchises in greater New York. (In *Municipal franchises*. New York, 1911.) ii, 101-140.

A thorough historical study.

WRIGHT, H. C. Development of transit control in New York City. *Annals of the American Academy of Political and Social Science*, xxxi, 18-41 (1908).

Good for franchise history, by periods, from 1850 to date.

### *Rochester*

CUTLER, J. G. Municipal control of public service corporations. *Proc., National Conference for Good City Government*, 1906: 291-297.

WARNER, G. E. Public ownership of lighting plant. *City Government*, vi, 50-52 (1899).

On municipal ownership history in Rochester and elsewhere.

*Syracuse*

HAMILTON, J. H. Syracuse water supply. *Municipal Affairs*, iv, 60-70 (1900).

History under private and municipal management, favoring municipal ownership.

HILL, W. R. City ownership of water supply. *Municipal Affairs*, vi, 730-737 (1903).

An historical account of the Syracuse waterworks under municipal and private operation.

*Troy*

POWELL, F. W. Two experiments in public ownership of steam railroads. *Quarterly Journal of Economics*, xxiii, 137-150 (1908).

Troy, N. Y., and North Brookfield, Mass.

The writer states that the first was a failure; the second a success.

OHIO

FRANCIS, G. B. Electric railways in the Ohio valley between Steubenville, Ohio, and Vanport, Pennsylvania. *Trans., American Society of Civil Engineers*, lxiii, 73-90 (1909).

Discussion: pp. 91-99. An engineering description, illustrated with photographs.

GASKILL, D. L. Ohio's public utility law's weakness. *Public Service*, xi, 49-51 (1911).

A brief discussion of certain sections of the act.

HOWE, F. C. Taxation of quasi-public corporations in the state of Ohio, and the franchise tax. *Annals of the American Academy of Political and Social Science*, xiv, 157-180 (1899). Treats chiefly of railroad taxation, but includes municipal utilities also.

Public Service Publishing Company. Complete reports on municipally owned utility plants in the state of Ohio. Chicago, 1914. 11 pamphlets.

A series of very brief reports, each considering separately the plants in a number of cities. Includes balance sheets and some statistics.

RADCLIFFE, C. A. Public utility act of Ohio. *Public Service Regulation*, i, 35 (1912).

An account of the current act replacing the railroad commission by a public service commission.

ROBERTS, W. H. An auxiliary hydro-power plant. *Aera*, iii, 124-128 (1914).

An engineering description of a traction development in Ohio, illustrated with photographs.

SIDLO, T. L. Consolidation of public utilities in Ohio. *Journal of Political Economy*, xviii, 388-392 (1910).

An interesting account of current developments.

#### *Akron*

FROST, H. H. Description of Akron waterworks plant. *Proc., Central States Waterworks Association*, 1912: 135-137.  
Discussion: pp. 137-139.

#### *Cincinnati*

JENKINS, W. C. The public utilities of Cincinnati. *Public Service*, xv, 187-188 (1913).

Describes the influence of good service upon the growth of the city.

LOWRIE, S. G. Public utility problems in Cincinnati. *Utilities Magazine*, i, no. 2, 7-14 (1915).

MAY, M. B. Cincinnati. *Annals of the American Academy of Political and Social Science*, xxx, 578-580 (1907).

*In* The relation of the municipality to the water supply: a symposium. Very brief historical and descriptive account of the water service.

#### *Cleveland*

BALLARD, F. W. The Cleveland municipal lighting plant. *Utilities Magazine*, i, no. 6, 9-16 (1916).

History and analysis of results.

— The design and operation of the Cleveland municipal electric light plant. *Trans., American Society of Mechanical Engineers*, xxxvi, 649-676 (1914).

Discussion: pp. 676-691. Includes photographs, tables and charts.

BEMIS, E. W. Cleveland. *Annals of the American Academy of Political and Social Science*, xxx, 569-571 (1907).

*In* The relation of the municipality to the water supply: a symposium. Very brief historical and descriptive account of the water service.

— The Cleveland street railway settlement. *Quarterly Journal of Economics*, xxiv, 550-560 (1910).

*Cleveland*—continued.

BEMIS, E. W. The franchise situation and the referendum in Cleveland. Proc., National Conference for Good City Government, 1902: 194–207.

— The franchise situation in Cleveland. Municipal Affairs, vi, 261–267 (1902).

Reprint.

— The street railway settlement in Cleveland. Quarterly Journal of Economics, xxii, 543–575 (1908).

An excellent analysis of the Taylor settlement.

BRASHEARS, W. F. Passing of three cent fares. Public Service, xvii, 101–103 (1914).

— Three cent car fares on trial. Public Service, xiv, 201–204 (1913).

An analysis of results, with tables of statistics.

CLOUGH, E. B. The truth about Cleveland traction. Public Service, ii, 133–135 (1907).

History under Mayor Johnson.

DAVIES, H. J. Some accounting features of the Cleveland railway company's franchise. Proc., American Street and Interurban Railway Accountants' Association, 1910: 125–150.

Discussion: pp. 150–154. Of accounting interest only; includes many tables.

DOOLITTLE, F. W. The Cleveland experiment. (*In* Studies in the cost of urban transportation service. New York, 1916.)

355–438.

An excellent study of the history of Cleveland traction franchises and fare experiments.

— Railway operation in Cleveland. Electric Railway Journal, xlvi, 359–364 (1916).

DUFFY, C. N. The Cleveland railway situation. Proc., American Electric Railway Association, 1913: 110–123.

An excellent analysis of the ordinance and of conditions in Cleveland.

— — — Aera, ii, 350–362 (1913).

Reprint.

*Cleveland* — continued.

DUFFY, C. N. Economics of the Cleveland railway situation as developed in the 1913 arbitration decision. *Electric Railway Journal*, xlvi, 770-773 (1913).

Abstract.

— Failure of three cent car fares. *Public Service*, xv, 153-156 (1913).

Abstract.

HAYDEN, W. S. The street railway situation in Cleveland. *Proc., National Conference for Good City Government*, 1909: 403-416.

An historical account.

HODGE, W. H. Three cent traction service. *Public Service*, v, 67-76 (1908).

HOWE, F. C. Municipal ownership in Cleveland. *Moody's Magazine*, ii, 511-514 (1906).

*In Municipal ownership and operation: symposium.*

Traction history in Cleveland under Mayor Johnson. There is agitation only, because of no state provision for municipal ownership.

NASH, L. R. The Cleveland railway situation. *Stone and Webster Journal*, xviii, 124-158 (1916).

History and analysis, with data, map and charts.

NEWCOMB, H. T. Cleveland's street railway problems. *Moody's Magazine*, ii, 507-510 (1906).

*In Municipal ownership and operation: symposium.*

OSSOSKI, SIDNEY. The basis of valuation in case of municipal purchase of street railways. *Electric Railway Journal*, xxxvi, 999-1000 (1910).

Procedure at Cleveland and Chicago used for illustration.

SIDLO, T. L. Cleveland invalidity clause: a new development in public utilities ordinances. *Journal of Political Economy*, xix, 124-128 (1911).

A brief account of the clause which provides that if any of the rates or provisions of the franchise are declared invalid, the corresponding power is to be in the city council.

Includes a reprint of the franchise section.

*Cleveland* — continued.

SPRINGBORN, W. J. Municipal electric lighting plants for Cleveland, Ohio. *Municipal Engineering*, xlvi, 14-15 (1914).

On the results of operation.

— Municipal ownership of water plants. *Proc., Central States Waterworks Association*, 1913: 31-42.

STEVENS, F. E. Cleveland. *Annals of the American Academy of Political and Social Science*, xxvii, 208-210 (1906).

*In* *The relation of the American municipalities to the gas and electric light supply: a symposium.*

Very brief description of the services.

WILCOX, D. F. How the Chicago and Cleveland street railway settlements are working out. *National Municipal Review*, i, 630-638 (1912).

A good analysis.

— — — *Engineering News*, lxviii, 526-529 (1912).

Abstract.

— The street railway settlement franchises of Chicago and Cleveland. (*In Municipal franchises*. New York, 1911.) ii, 141-191.

A thorough historical study.

WILLIAMS, A. D. Cleveland municipal electric plants. *Power*, xxxviii, 740-742 (1913).

A description, illustrated with photographs and diagrams.

WILSON, H. W. Three cent light in Cleveland. New York, 1914. 11 pp.

History and analysis of results of municipal ownership in Cleveland. Includes also a discussion of rates and costs.

WITT, PETER. Public favors skip-stop. *Aera*, iv, 224-227 (1915). Brief account of the plan used by the Cleveland railways.

WOOTAN, J. B. The truth about Cleveland. *Public Service*, xx, 102-103, 105 (1916).

Statistical analysis of the results of the municipal electric plant.

*Columbus*

HODGE, W. H. Columbus: a city in the dark. *Public Service*, i, 91-94 (1906).

Description of the municipal street lighting in Columbus.

WILSON, THOMAS. City and state power plants at Columbus, Ohio. *Power*, xlvi, 322-326 (1915).

A description of the various power plants, illustrated with photographs.

*Hamilton*

EGBERT, H. McC. Failure of municipal gas plant. *Public Service*, i, 15-16 (1906).

*Newark*

DEACON, W. G. The public utilities of Newark, Ohio. *Public Service*, xiv, 5-10 (1913).

History and description of the service, municipal and private; illustrated with photographs.

*Springfield*

RINKLIFF, G. L. Springfield's street railway franchise. *Municipal Journal and Engineer*, xxxiv, 578-579 (1913).

*Toledo*

DEACON, W. G. A three cent car fare test. *Public Service*, xvi, 141-142, 157-160 (1914).

H. L. Doherty offers to allow Toledo to operate the street railways for one year.

LANG, A. E. The Toledo street railway situation. *Proc., American Electric Railway Association*, 1911: 250-256.

A brief account of traction history in Toledo, and the existing situation.

— — — Public Service, xi, 157-159 (1911).

Abstract.

*Troy*

POOL, L. A. Municipal lighting plant of Troy, Ohio. *Municipal Engineering*, xliv, 197-201 (1913).

A description, with brief comment on financial results; illustrated with photographs.

OKLAHOMA

BOZELL, H. V. Data on municipal plant operation in Oklahoma.  
?, 1916. 85 pp.  
Alphabetical, by cities.

MCKAY, E. F. The Oklahoma commission. Public Service Regulation, i, 29-30 (1912).

OREGON

DEARBORN, R. H. Physical valuation of electrical properties in Oregon. Journal of Electricity, Power and Gas, xxviii, 49-50 (1912).

Abstract. The valuations made by the Oregon commission are believed by the writer to be uniformly low.

*Eugene*

MARSTON, GLENN. Failure of municipal plants at Eugene, Ore. Public Service, xv, 63-65 (1913).

A popular analysis, the writer asserting that faulty accounting conceals the facts; illustrated with photographs.

MEYERS, ALVIN. Eugene, Ore., municipal light and water plant. Municipal Engineering, xliv, 427-428 (1913).  
A brief description of the plant, with schedule of rates.

PENNSYLVANIA

BOWN, C. E. Some defects in the present Pennsylvania statute on public utilities. Annals of the American Academy of Political and Social Science, liii, 45-53 (1914).

EASTMAN, F. M. The taxation of public service corporations in Pennsylvania. Philadelphia, 1905. 46 pp.  
An historical and critical account of state and local taxation, with quotations from decisions, tables, and an index.

MUNSON, C. LAR. Pennsylvania public service law. Yale Law Journal, xxiii, 214-247 (1914).  
A detailed analysis of the act.

— The public service company law of Pennsylvania (approved July 26, 1913): digested, topically arranged and indexed (with a copy of the act). Williamsport, 1913? 75 pp.

STRATTON, I. W. State and local regulation in Pennsylvania. *Annals of the American Academy of Political and Social Science*, lvii, 175-185 (1915).  
A criticism of the commission law, because of too much power, red tape and irresponsibility.

TENER, J. K. The need for a public utilities bill in Pennsylvania. *National Municipal Review*, i, 401-403 (1912).  
A popular article advocating a commission with greater powers of enforcement of its findings.

TRINKLE, W. N. The public service company law of Pennsylvania. *Annals of the American Academy of Political and Social Science*, liii, 36-44 (1914).  
An analysis and criticism of the act.

WHERRY, W. M., JR. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania, and West Virginia. ?, 1913. 91 pp.  
Each law analyzed separately by sections.

WOODRUFF, C. R. Recent street railway legislation in Pennsylvania and Philadelphia. *Municipal Affairs*, v, 419-426 (1901).  
Brief account of current legislative corruption.

*Philadelphia*

BRYCE, JAMES. The Philadelphia gas ring. (*In The American commonwealth*. Revised edition. New York, 1910.) ii, 406-425.  
An account of political corruption in Philadelphia.

DICKERMAN, J. C. Lower electric rates in Philadelphia. *American City*, xiv, 341-342 (1916).  
A popular account of litigation before the commission.

HICKS, T. L. The Philadelphia gas works under private operation. *World Today*, xiii, 1037-1040 (1907).  
A very brief, popular summary of the history of the Philadelphia gas plant under municipal and private operation.

LEWIS, E. O. Philadelphia's relation to rapid transit company. *Annals of the American Academy of Political and Social Science*, xxxi, 600-611 (1908).  
A discussion of the contract of 1907.

*Philadelphia* — continued.

MCLAIN, F. D. The street railways of Philadelphia. Quarterly Journal of Economics, xxii, 233–260 (1908).  
A good historical treatment.

RINGE, H. R. Philadelphia. Annals of the American Academy of Political and Social Science, xxx, 562–567 (1907).

*In* The relation of the municipality to the water supply: a symposium. Brief historical and descriptive account of the water service; with tables of data.

ROBBINS, HAYES. Philadelphia and its gas works: an instance of the advantages resulting from substituting private for municipal control of a public utility. World Today, vii, 1536–1542 (1904).

Illustrated with photographs; good.

ROGERS, J. I. Municipal gas in Philadelphia. Municipal Affairs, i, 730–744 (1897).

A popular historical account, answering the claim of the leasing company that the municipal operation was inefficient. Includes tables of statistics.

ROWE, L. S. The municipality and the gas supply, as illustrated by the experience of Philadelphia. Annals of the American Academy of Political and Social Science, xi, 301–323 (1898). Historical, opposing the lease of the municipal gas plant to a private company. Includes tables of statistics.

— (In Problems of city government. New York, 1908.)  
241–270.

A good historical account of municipal and private ownership of gas in Philadelphia; includes tables of statistics.

— The relation of the city of Philadelphia to the gas supply. (In National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 588–664.

SPEIRS, F. W. The Philadelphia gas lease. Municipal Affairs, i, 718–729 (1897).

A popular account of the lease of the municipal plant, which the writer claims was due to politics, not to failure of municipal operation.

*Philadelphia* — continued.

SPEIRS, F. W. Street railway system of Philadelphia: its history and present conditions. *Johns Hopkins University Studies in Historical and Political Science*, xv, 93–215 (1897).

TAYLOR, A. M. Philadelphia's transit problem. *Annals of the American Academy of Political and Social Science*, lvii, 28–32 (1915).

— The solution of a city's transit problem. *Electric Journal*, xi, 514–542 (1914).

An elaborate study of traffic conditions in Philadelphia, illustrated with maps, charts and tables. Supplementary to the report of the transit commissioner, 1913.

WILCOX, D. F. Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities. New York, 1910–1911. 2 vols.

On the lease of the Philadelphia municipal gas plant, see i, pp. 566–572.

WOODRUFF, C. R. The Philadelphia gas works: a modern instance. *American Journal of Sociology*, iii, 601–613 (1898).

— Philadelphia street railway franchises. *American Journal of Sociology*, vii, 216–233 (1901).

Historical discussion of corruption in traction franchise granting.

— Recent street railway legislation in Pennsylvania and Philadelphia. *Municipal Affairs*, v, 419–426 (1901).

Brief account of current legislative corruption.

*Pittsburgh*

JENKINS, W. C. Unusual traction conditions in Pittsburgh. *Public Service*, xv, 5–10 (1913).

A description of conditions and their effect on the type of car used, illustrated with photographs.

*Tarentum*

HUDSON, LEO. An interesting example of direct competition between publicly and privately owned waterworks plants in Tarentum, Pa. *Engineering and Contracting*, xliv, 162–163 (1915).

### RHODE ISLAND

#### *Providence*

FRANCIS, G. B. The street railway system of Providence, Rhode Island, and vicinity. *Journal of the Association of Engineering Societies*, xxix, 29-40 (1902).

Discussion: pp. 41-42. An engineering description, illustrated with photographs and diagrams.

LAKEY, F. E. Providence. *Annals of the American Academy of Political and Social Science*, xxx, 588-590 (1907).

*In* The relation of the municipality to the water supply: a symposium. Very brief historical and descriptive account of the water service.

SHERMAN, S. A. Providence. *Annals of the American Academy of Political and Social Science*, xxvii, 218-220 (1906).

*In* The relation of the American municipalities to the gas and electric light supply: a symposium.

Very brief description of the services.

### SOUTH DAKOTA

#### *Brookings*

SORENG, E. M. Cost figures from Brookings, S. D. *Electrical World*, lxii, 1321 (1913).

A description of the municipal electric light plant, illustrated with photographs.

### TENNESSEE

#### *Nashville*

HEAD, J. M. One mayor's experience. *Proc., National Conference for Good City Government*, 1906: 269-276.

A popular account of the agitation for municipal ownership in Nashville and its effects, the writer favoring municipalization.

WATSON, C. C. Nashville's deteriorated waterworks. *Public Service*, iii, 101-103 (1907).

Description and history, illustrated with photographs.

### TEXAS

BURDICK, R. H. Performance of diesel-engine plants in Texas. *Electrical World*, lxvii, 587-592 (1916).

Operating data from eight stations; with charts, tables and photographs.

HANEY, L. H. Railway regulation in Texas. *Journal of Political Economy*, xix, 437-455 (1911).

A discussion of the railroad commission law; of some general interest.

PAXTON, E. T. Public service rates in Texas cities. Austin, 1915. 141 pp.

Bulletin of the University of Texas: Municipal research series, no. 10. Tables of rates charged for water, sewerage, electric light and power, telephone and traction. Arranged by cities, under each service.

POTTS, C. S. Texas stock and bond law. *Annals of the American Academy of Political and Social Science*, liii, 162-171 (1914).

History and discussion.

THOMPSON, R. A. Method used by the Railroad commission of Texas, under the stock and bond law, in valuing railroad properties. *Trans., American Society of Civil Engineers*, lii, 328-345 (1904).

Discussion: pp. 346-364. A brief, technical description of the methods used in taking the inventory, with illustrative forms and tables.

#### *Houston*

SHELDON, P. H. Controversy over electric rates in Houston, Texas. *Municipal Engineering*, xlvii, 275-278 (1914).

#### *San Antonio*

POTTER, ALEXANDER. An important waterworks rate and appraisal investigation. *American City*, viii, 65-73 (1913).

A popular account of an appraisal made by the writer.

#### *Terrell*

KELLEY, EDWARD. Operating a central station against municipal competition. *Public Service*, xv, 33-36 (1913).

#### **VERMONT**

MARSTON, GLENN. Vermont public utilities bill. *Public Service*, vi, 109-110 (1909).

A brief arraignment of the act.

*Burlington*

MARSTON, GLENN. Municipal electric competition, Burlington, Vt. *Public Service*, vi, 69-70 (1909).

Description, with photographs and some discussion.

— Municipal ownership in Burlington, Vermont. *Concerning Municipal Ownership*, iv, 71-72 (1909).

An analysis of results of operation of the municipal electric light plant.

*St. Albans*

RENNER, C. J. The experience of a small city with water meters and water rates. *American City*, xi, 474-478 (1915).

Illustrated with tables and charts.

VIRGINIA

BRAXTON, A. C. The Virginia state corporation commission. *American Law Review*, xxxviii, 481-499 (1904).

An historical sketch and analysis of the law; technical.

MAGRUDER, F. A. Recent administration in Virginia. *Johns Hopkins University Studies in History and Political Science*, xxx, 11-199 (1912).

Public service corporations: pp. 147-162.

A good historical study of the commissions and public service regulation.

*Danville*

ROGERS, W. O. Danville municipal lighting plant. *Power*, xlivi, 572-577 (1916).

Engineering description, with photographs, diagrams and tables.

*Richmond*

WOOTAN, J. B. Richmond street lighting plant. *Public Service*, xxi, 170-173 (1916).

An analysis of results.

WASHINGTON

BERGLUND, ABRAHAM. Valuation of railroads in the state of Washington. *Journal of Political Economy*, xxi, 332-344 (1913).

An historical account, with tables of results; of some general interest.

SMITH, J. A. Municipal *vs.* state control of public utilities. *National Municipal Review*, iii, 34-43 (1914).

Arguments against exclusive state control, including brief discussion of the Washington law.

*Seattle*

DEACON, W. G. Toll of politics. *Public Service*, xvii, 71-72, 82 (1914).

A popular discussion of results of municipal electric lighting in Seattle.

GRAMBS, W. J. The inefficiency of municipal ownership. *Stone and Webster Public Service Journal*, xvii, 321-348 (1915).

History and analysis of municipal ownership in Seattle.

KIDSTON, W. L. Seattle municipal lighting plant. *Power*, xli, 182-185 (1915).

An engineering description, with photographs and diagrams.

MARSTON, GLENN. Electric rates in Seattle, Wash. *Public Service*, xv, 27-30 (1913).

An analysis of the results of operation of the municipal electric plant, with charts.

— Seattle, Wash., municipal electric plant. *Public Service*, xvi, 63-66 (1914).

Reply to criticism of his previous article.

PARKER, A. M. The first municipal street railway in America. *Independent*, lx, 1153-1157 (1906).

A brief description of the West Seattle municipal railway; illustrated with photographs.

Ross, J. D. The municipal lighting plant at Seattle, Wash. *Municipal Engineering*, xlv, 464-467 (1913).

A brief description, with a diagram and photograph.

— Seattle, Wash., municipal light and power plant. *Municipal Engineering*, xliv, 556-560 (1913).

A description of the plant and its operation, with tables of rates charged; illustrated with a photograph and chart.

SMITH, J. A. Seattle. *Annals of the American Academy of Political and Social Science*, xxvii, 222-224 (1906).

In *The relation of the American municipalities to the gas and electric light supply: a symposium*.

Very brief description of the services.

*Spokane*

MARKS, W. D. Recapitulation of report on gas rates and prices for the city of Spokane. (*In* Practical rate making and appraisement. South Hadley, 1914 ?) 11-59.

A detailed study, with tables of statistics.

MARSTON, GLENN. Spokane, Wash., waterworks heavy loser. Public Service, xv, 101-103 (1913).

A brief analysis of the results of municipal operation.

*Tacoma*

RICHARDS, R. H. Tacoma's Nisqually River development. Electrical World, lxii, 227-229 (1913).

An engineering description of the municipal hydroelectric station, illustrated with photographs.

WEST VIRGINIA

WHERRY, W. M., JR. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania and West Virginia. ?, 1913.  
91 pp.

Each law analyzed separately by sections.

*Wheeling*

DEACON, W. G. Sale of Wheeling gas plant urged. Public Service, vi, 115-117 (1909).

LYONS, B. F. Municipal ownership. Progressive Age, xxiv, 39-46 (1906).

Discussion of method of studying results of existing municipal plants, with analyses of the results in Wheeling, Manchester and Sheffield for illustration.

— Municipal ownership of gas works. Municipal Engineering, xxx, 49-58 (1906).

WISCONSIN

ADAMS, T. S. Valuation of railway property for purposes of taxation. Journal of Political Economy, xxiii, 1-16 (1915).

A discussion from the standpoint of Wisconsin practice and experience. Of some interest for all public utilities.

BRYAN, W. H. Going value as an element in the appraisal of public utility properties. *Journal of the Association of Engineering Societies*, xliii, 147-158 (1909).  
Discussion: pp. 286-288. A very interesting discussion of intangible values as considered by the Wisconsin commission, and by J. W. Alvord in his "Notes on going value and methods for its computation."

— — — *Journal of Electricity, Power and Gas*, xxiv, 31-35 (1910).  
Reprint.

CADBURY, J. N. Regulating the quality of public utility service. *Annals of the American Academy of Political and Social Science*, liii, 262-268 (1914).  
A brief description of the Wisconsin commission's practice.

— Standards for gas and electric service. *Public Service Regulation*, ii, 94-99 (1913).  
An outline of proposed changes in the service standards of the Wisconsin commission; with brief discussion.

COMMONS, J. R. The La Follette railroad law in Wisconsin. *American Monthly Review of Reviews*, xxxii, 76-79 (1905).

— The Wisconsin public utilities law. *American Review of Reviews*, xxxvi, 221-224 (1907).  
Brief popular discussion of the law and its provisions.

CRAVATH, J. R. Demand and diversity factors and their influence on rates. *Electrical World*, lvi, 567-570 (1910).  
A good discussion, with tables compiled by the Wisconsin commission; semi-technical.

CROWLEY, J. C. Control helps utilities. *Public Service Regulation*, i, 181 (1912).

DREHER, H. W. Effect of utility regulations upon the banks. *Public Service*, xv, 21-22 (1913).  
On the beneficial results of the Wisconsin public utility law.

ERICKSON, HALFORD. The indeterminate franchise or permit. *Electrical Review and Western Electrician*, lxv, 224-227, 283-285 (1914).  
A general discussion of the indeterminate permit and the history of its use in Wisconsin.

ERICKSON, HALFORD. Methods of determining life of public utilities. *Engineering and Contracting*, xxxviii, 448-450 (1912).

Abstract. Treats chiefly of methods of estimating life of equipment used by the Wisconsin commission.

— Methods of providing for and recording depreciation. *Engineering and Contracting*, xxxviii, 506-511 (1912).

A technical discussion of the accountancy of depreciation of the Wisconsin commission; with tables.

A continuation of the abstract entitled "Methods of determining life of public utilities."

— Rates and rate making under the Wisconsin public utility law. *Proc., American Waterworks Association*, xxxiii, 49-68 (1913).

Discussion: pp. 68-77. "My purpose here is to explain the work involved, the facts that are needed and the methods employed in making rates for waterworks under the public utility law in Wisconsin."

— The regulation of public utilities in Wisconsin. *Journal of the Western Society of Engineers*, xviii, 398-422 (1913).

Discussion: pp. 423-440. A good elementary description of the work of the commission.

— — — Public Service, xiv, 135-138, 179-181 (1913).

Abstract.

— Regulation of utilities by commission. *Railway Age Gazette*, liv, 755-759 (1913).

Abstract.

— Wisconsin method of depreciation accounting. *Gas Age*, xxxiv, 113-117 (1914).

ESCH, FRED. Utility law variations. *Public Service Regulation*, i, 492-494 (1912).

A comparison of the California and Wisconsin acts.

FAIRCHILD, A. W. Review of recent legislation in Wisconsin affecting public utilities. *Electric Railway Journal*, xxxix, 145-146 (1912).

A brief description of the stock and bond law, and the indeterminate permit legislation.

FOOTE, A. R. Regulation of public utilities: a comparison of the New York and Wisconsin public utility bills. Columbus, 1911. 36 pp.

A detailed comparison of the various clauses; with a short bibliography.

GILMORE, E. A. The Wisconsin public utilities act. Green Bay, xix, 517-525 (1907).

A detailed analysis of the provisions of the act.

HOLMES, F. L. Regulation of railroads and public utilities in Wisconsin. New York, 1915. 375 pp.

Ch. i. Provisions of the railroad and utility laws.  
ii. Commission organization and procedure.  
iii. Physical valuation of railroads and utilities.  
iv. Rate of return.  
v. Standardization of service.  
vi. Uniform accounting.  
vii. Depreciation.  
viii. Putting utilities on a business basis.  
x. Making of utility rates.  
xi. Street and interurban railways.  
xii. Electric, gas and heating utilities.  
xiv. Water utilities.  
xv. The indeterminate permit and convenience and necessity laws.  
xvi. Regulation of stocks and bonds.  
xvii. Water power legislation.  
xx. State control of municipally owned plants.  
xxi. State *vs.* local control.  
xxii. Does regulation retard investments ?  
xxiii. Commission and the courts.  
xxiv. Conclusion.

A very good elementary account of the work of the commission.

— Regulation that regulates. Independent, lxviii, 905-910 (1910).

A popular account of the Wisconsin commission and its work; with portraits of the commissioners.

HUDNALL, G. H. Public service commission law of Wisconsin. Proc., American Political Science Association, iv, 316-323 (1907).

JOHNSON, R. V. Workings of Wisconsin commission. Public Service, xii, 129-132, 145-146 (1912).

Treats chiefly of the resulting benefits, and includes extracts from remarks of various utility managers.

KING, C. L. Minnesota home rule and Wisconsin regulation. *National Municipal Review*, iii, 564-572 (1914).  
A reply to Minnesota home rule league's "Regulation of public utilities in Wisconsin."  
A good discussion of the work of the Wisconsin commission, and results therefrom.

LAPP, J. A. Public utilities—control. *American Political Science Review*, i, 626-638 (1907).  
Analysis and comparison of the New York and Wisconsin commission laws.

LARSON, C. M. State regulation of municipally owned plants. *Journal of the American Waterworks Association*, ii, 515-537 (1915).  
On the benefits of regulation of municipally owned plants, especially as to service. Illustrated by results in Wisconsin, with tables of statistics.

LEWIS, H. T. Interest and profits in rate regulation: the practice of the Wisconsin railroad commission. *Political Science Quarterly*, xxvii, 239-259 (1912).  
A good analysis, with many quotations from cases before the commission.

MATHEWS, G. C. Wisconsin water rates. *Public Service Regulation*, i, 33-35 (1912).  
Discussion of the methods and procedure used.

MEYER, B. H. State supervision of electric railways in Wisconsin. *Annals of the American Academy of Political and Social Science*, xxxvii, 160-169 (1911).  
Relates to service requirements in particular.

— What the Wisconsin utilities commission has done. *Concerning Municipal Ownership*, iii, 27-28 (1908).  
Abstract.

— The Wisconsin public utilities commission. (*In KING, C. L. The regulation of municipal utilities.* New York, 1912.) 296-317.  
Reprinted from Proc., National Conference for Good City Government.

— The Wisconsin public utilities law. *Proc., National Conference for Good City Government*, 1908: 257-268.  
An account of the work of the commission and the resulting benefits; with one table.

MEYER, B. H. The Wisconsin public utilities law. *Electric Railway Journal*, xxxiii, 103-104 (1909).  
Abstract.

MILLER, W. E. Ashland water rate decision explained. *Engineering Record*, lxxi, 805-807 (1915).  
On decisions of the Wisconsin commission refusing to accept 4 per cent as an adequate return, and revising rates.

— The individuality of public utilities, notably waterworks. *Journal of the American Waterworks Association*, i, 614-628 (1914).

A tabular comparison of population served and length and size of mains for various Wisconsin plants, illustrating the difficulty of directly comparing values or rates. Includes charts and discussion.

Minnesota Home Rule League. Regulation of public utilities in Wisconsin: an analysis of the system and the results. Minneapolis, 1914. 46 pp.

A brief arraignment of the commission; unconvincing.

For a reply see C. L. King, "Minnesota home rule and Wisconsin regulation."

MORGAN, W. O. The indeterminate permit as a satisfactory franchise. *Annals of the American Academy of Political and Social Science*, xxxvii, 142-159 (1911).  
Discussion of the Wisconsin experience for illustration.

MORTIMER, J. D. The Wisconsin indeterminate permit law. *Aera*, ii, 7-20 (1913).

A good analysis of the law, including a reprint of the statutory provisions and excerpts from court decisions.

PENCE, W. D. The functions of a technical staff in public utility regulation. *Proc., Indiana Sanitary and Water Supply Association*, 1913: 114-142.

Describes the work of the Wisconsin commission's technical staff and includes an outline of the inventory used and of the form of organization.

— Functions of a technical staff in the regulation of public utilities. *Engineering Record*, lxvii, 260-262 (1913).

Abstract.

— The valuation and inspection work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Engineering News*, lxi, 227-229 (1909).

Abstract.

PENCE, W. D. Valuation by Wisconsin state engineers. *Public Service Regulation*, ii, 127-130 (1913).

Abstract.

— Wisconsin service inspection and improvement. *Public Service Regulation*, ii, 167-171 (1913).

Abstract.

— The work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Journal of the Western Society of Engineers*, xiv, 73-100 (1909).

Discussion: pp. 100-111. A full account of the organization and work of the engineering department.

— — — *Engineering Record*, lix, 10-12, 49-52, 73-75 (1909). Reprint.

ROEMER, J. H. The causes and effects of a public utility commission. *Public Service*, xi, 37-39, 85-88 (1911).

Treats chiefly of the regulation of service by the Wisconsin commission.

— — — Madison, 1911. 25 pp.

— Certain important provisions of the public utilities law of Wisconsin, and the results of their operation. *Kansas City?* 1911? 20 pp.

— Methods of regulating public utilities. *Public Service*, xvii, 79-82 (1914).

— Some features of state regulation of public utilities. Madison, 1909. 25 pp.

A very general and popular article on regulation and the work of the Wisconsin commission.

SALMON, C. B. Wisconsin public utility law: its operation and results. *Proc., American Waterworks Association*, xxix, 163-171 (1909).

Discussion: pp. 171-183. An analysis of the law, by clauses.

— — — *Municipal Engineering*, xxxvii, 27-31 (1909). Reprint.

— The Wisconsin utility law: its benefits and restrictions. *Proc., Central States Waterworks Association*, 1912: 97-109.

Discussion: pp. 109-112. A good elementary account of the commission's work, including a brief analysis of the act.

SIEFERT, C. A. Uniform classification. *Public Service Regulation*, i, 285-288 (1912).

A description of the water utility accounting under the Wisconsin commission.

SNIDER, G. E. The taxation of the gross receipts of railways in Wisconsin. *Publications, American Economic Association*, 3d series, vii, 521-658 (1906).

STRAIT, E. N. Wisconsin commission method of rate making. *Gas Age*, xxxv, 263-268 (1915).

Describes the "mechanical procedure" by which gas and electric rates are derived. Includes illustrative tables and one chart.

WATKINS, G. P. Electrical rates in the opinions of the Wisconsin commission. *Quarterly Journal of Economics*, xxvii, 373-378 (1913).

#### *Chippewa Falls*

GORDON, F. G. R. Chippewa Falls defeats municipal ownership. *Concerning Municipal Ownership*, ix, 103-105 (1916).

#### *Madison*

HEIM, J. B. Meter rates. *Proc., American Waterworks Association*, xxiv, 251-267 (1904).

Discussion: pp. 277-289. An account of a rate controversy in Madison; includes an elaborate table of waterworks statistics and charges in various American cities.

— Municipal ownership of waterworks. *Municipal Engineering*, xvii, 87-90 (1899).

History of the municipal waterworks of Madison.

#### *Milwaukee*

BERNHARD, F. H. Milwaukee's new municipal lighting system.

*Municipal Journal*, xl, 645-648, 683-685 (1916).

Engineering description, illustrated with photographs.

BUTLER, J. A. Milwaukee. *Annals of the American Academy of Political and Social Science*, xxvii, 213-215 (1906).

*In* The relation of the American municipalities to the gas and electric light supply: a symposium.

Very brief description of the services.

*Milwaukee* — continued.

BUTLER, J. A. Street railway problem in Milwaukee. Municipal Affairs, iv, 212-218 (1900).

A very popular historical sketch.

DOOLITTLE, F. W. The Milwaukee experiment. (*In* Studies in the cost of urban transportation service. New York, 1916.) 439-467.

An excellent study of traction franchise and fare history in Milwaukee.

MILLER, W. E. Charges for public water service to private fire protection systems. Proc., American Waterworks Association, xxxiii, 115-125 (1913).

A discussion of the charges in Milwaukee.

STEARNS, R. B. Zone system of fares in practice. Electric Railway Journal, xlv, 836-838 (1915).

A good analysis of the results of six months' operation in Milwaukee, illustrated with two charts.

*Platteville*

BUTTERWORTH, W. C. The cost and price of gas in a small city. American Gas Light Journal, cii, 180-183 (1915).

An elaborate tabular comparison of the cost and rates for gas in Platteville, with some discussion.

AUSTRIA

FAIRLIE, J. A. Municipal government in Vienna. (*In* Essays in municipal administration. New York, 1908.) 316-329.

Discusses municipal ownership briefly (pp. 323-329).

BELGIUM

WINSLOW, A. A. City ownership of street cars in Liège. U. S. Consular Reports, lxv, no. 246, 332-334 (1901).

A brief account of the city purchase and leasing of the tramways.

CANADA

BEECHER, H. W. Kamloops' steam turbine power plant. Municipal Journal, xxxvii, 592-594 (1914).

An engineering description, illustrated with photographs.

BOLTON, R. P. Cheap electricity in Toronto. *Concerning Municipal Ownership*, ix, 8-10 (1916).  
Supplementary to "Our interest in Canadian operations."

— Favoritism in rates. *Concerning Municipal Ownership*, viii, 278-281 (1915).  
Supplementary to "Our interest in Canadian operations."

— The financial methods of the power commission. *Concerning Municipal Ownership*, viii, 230-233 (1915).  
Supplementary to "Our interest in Canadian operations."

— General results of public operation in Ontario. *Concerning Municipal Ownership*, ix, 62-63 (1916).  
Supplementary to "Our interest in Canadian operations."

— Government electric railways. *Concerning Municipal Ownership*, viii, 254-257 (1915).  
Supplementary to "Our interest in Canadian operations."

— Our interest in Canadian operations. *Concerning Municipal Ownership*, viii, 206-209 (1915).  
On the hydroelectric power commission of Ontario.

CANNON, L. A. Electric franchises. *Canadian Engineer*, xxiii, 383-385 (1912).  
A sketch of franchise history in Quebec.

CHASE, W. G. Winnipeg municipal electric system. *Engineering News*, lxviii, 12-20 (1912).  
Engineering description, with diagrams and photographs.

CHRISTIE, A. G. Calgary's municipal power plant. *Power*, xlivi, 352-357, 389-390 (1916).  
Chiefly descriptive, but includes brief discussion of rates and operation.  
Illustrated with diagrams and photographs.

— Lethbridge municipal power plant. *Power*, xlivi, 462-466 (1916).  
Description, with photographs, tables and a diagram.

— Municipal electrical utilities of western Canada. *Power*, xlivi, 378-381 (1916).  
A brief survey of equipment and itemized production costs, including tables, and conclusions from investigation.

CHRISTIE, A. G. Municipal power plant at Medicine Hat. Power, xlivi, 138-142 (1916). Description, with photographs, diagrams and tables.

— Municipal power plant operated by Saskatoon, Canada. Power, xlivi, 606-609 (1916). Engineering description, with photographs, tables and a diagram.

— Regina municipal power plant. Power, xlvi, 776-781 (1915). Engineering description, illustrated with photographs and diagrams.

CURTIS, C. E. Taxation of street railways for purposes of revenue and control. Yale Review, viii, 173-201 (1899). A good, technical study. Includes tables showing the practice in various cities of the United States and Canada.

GORDON, F. G. R. The seamy side of a famous municipal enterprise. Concerning Municipal Ownership, ix, 30-32 (1916). Analysis of results in Winnipeg.

— The truth about Calgary. Concerning Municipal Ownership, ix, 6 (1916). Analysis of the results of the various municipal enterprises.

HARDENBURG, W. E. Calgary's municipal street railway. Municipal Journal, xxxix, 395-397 (1915). A description and discussion of operating results, illustrated with photographs.

HOCKEN, H. C. The hydroelectric system in Toronto. Annals of the American Academy of Political and Social Science, lvii, 246-253 (1915). Brief account of the municipal plant.

HOLLOWAY, W. R. Municipal ownership in Canada. U. S. Consular Reports, lxxv, no. 285, 971-972 (1904). Current statistics on municipal ownership in Canada.

MACLEAN, A. Municipal ownership in Edmonton. Proc., American Waterworks Association, xxix, 593-597 (1909). Discussion: pp. 597-608. An outline of the municipal activities of Edmonton.

MCLEAN, S. J. Railway rate regulation in Canada. Forum, xxxii, 419-429 (1902). A brief historical review.

MELLING, H. T. Operating costs for municipal gas-engine plant. Power, xliv, 13-14 (1916). Description of plant and operation at Edmonton, illustrated with two photographs.

ROBINSON, S. C. What would be a proper charge for service under these conditions? Proc., American Waterworks Association, xxviii, 545-547 (1908). A very brief discussion of rates for private fire protection at Walkerville, Ontario.

SARA, R. A. Another municipal electric plant supplying lighting current at 3 cents per kw.-hr. Engineering News, lxxii, 655-656 (1914). An account of the Winnipeg plant, with tables of rates and operating statistics.

WHITTEN, R. H. The Toronto auction sale and maximum dividend system. (*In Regulation of public service companies in Great Britain.* New York, 1914.) 204-218.

#### FRANCE

BIETTE, L. The metropolitan system of Paris. Trans., American Society of Civil Engineers, liv, part F, 299-324 (1904). Discussion: pp. 367-376. An engineering description of the Paris metropolitan subway system, illustrated with diagrams.

DARY, GEORGES. The charges for electrical energy supply in France. Electrical Review (London), lxii, 1045-1046, 1086 (1908). A discussion of the electric rates in various cities.

HOLCOMBE, A. N. The electric lighting system of Paris. Political Science Quarterly, xxvi, 122-132 (1911). A good historical account of the municipal and private plants.

LEROY-BEAULIEU, PAUL. Public ownership in France. North American Review, cxcvii, 295-311 (1913). An historical analysis and discussion of various government industries in France, railroads and public utilities being included; opposes public ownership.

WHITTEN, R. H. The Paris subway system: with special reference to franchise terms and conditions. *Engineering News*, lxv, 70-75 (1911).

An excellent description; includes a map.

#### GERMANY

BARNES, C. E. Municipal tramways in Cologne. *U. S. Consular Reports*, lxviii, no. 258, 369-370 (1902).

A very brief account of the municipal purchase and operation of the tramways.

BASSETT, E. M. Municipal ownership of public utilities in Germany. *American City*, viii, 364-366 (1913).

Abstract.

BROOKS, R. C. The municipal gas works in Berlin. *Yale Review*, xiv, 361-373; xv, 24-39 (1906).

Detailed historical study; with tables of data.

— Municipalization of the Berlin electric works. *Quarterly Journal of Economics*, xxx, 188-194 (1915).

Brief historical account of the plant under private ownership, and of its recent municipal purchase.

DAWSON, W. H. Trading enterprises. (*In Municipal life and government in Germany*. London, 1914.) 208-259.

A brief historical description of the various municipal trading enterprises, public utilities being treated only incidentally.

DE FODOR, ETIENNE. Rates for electricity supply. *Trans., International Electrical Congress*, ii, 500-512 (1904).

Discussion: pp. 512-517. Includes rates in German cities.

DU BOIS, J. T. Municipal electric light and power in Germany. *U. S. Consular Reports*, lxvi, no. 211, 546 (1898).

A very brief list of cities in which the municipality owns, has built or leases the gas and electric plants. Of historical interest only.

FAIRLIE, J. A. Municipal conditions in some European cities. (*In Essays in municipal administration*. New York, 1908.)

303-315.

Historical sketches of utility conditions in various German cities.

HEYN, E. T. The municipal ownership of street railways in Germany. *American Monthly Review of Reviews*, xxxv, 329-333 (1907).

HEYN, E. T. Recent history of municipal ownership in Germany. *Municipal Affairs*, vi, 614-621 (1903).

HOWE, F. C. Socializing the means of transit. (*In European cities at work*. New York, 1913.) 177-188.  
A very popular account of municipal ownership of traction in Germany.

JAMES, E. J. Municipal gas and electricity in a typical German city — Halle, A. S. *Municipal Affairs*, iv, 574-594 (1900). History and analysis, with tables of data.

MEYER, H. R. Municipal ownership in Germany. *Journal of Political Economy*, xiv, 553-567 (1906).  
An annotated historical study, with tables of statistics. Street railways and electric lighting are discussed separately.

ROWE, L. S. Municipal ownership and operation of street railways in Germany. *Annals of the American Academy of Political and Social Science*, xxvii, 37-65 (1906).  
Good critical and historical account, with tables of statistics.

— — — (*In Problems of city government*. New York, 1908.) 281-329.  
Reprint.

TAWNEY, R. H. Municipal enterprise in Germany. *Economic Review*, xx, 423-437 (1910).  
A good economic analysis; with tables of statistics.

YOUNGMAN, ANNA. Frankfort-on-the-Main: a study in Prussian communal finance. *Quarterly Journal of Economics*, xxvii, 150-201, 329-372 (1913).  
Public utilities are discussed on pp. 332-343.

#### GREAT BRITAIN

ALDEN, PERCY. Municipal ownership. (*In Democratic England*. New York, 1912.) 192-214.

ASHLEY, PERCY. The water, gas, and electric light supply of London. *Annals of the American Academy of Political and Social Science*, xxvii, 20-36 (1906).  
Historical, each class of utilities being treated separately; brief account of municipalization; tables of data.

AVEBURY, J. L. On municipal and national trading. New York, 1907. 177 pp.  
Discusses loss and profit from municipal public utility operation, pp. 73-89. The writer opposes municipalization.

BALMFORTH, OWEN. The progress of municipal government. Westminster Review, clxxi, 272-280 (1909).  
History and discussion of municipal ownership in Great Britain.

BELL, SIR JAMES, and PATON, JAMES. Glasgow: its municipal organization and administration. Glasgow, 1896. 426 pp.  
Ch. v. Public lighting.  
xxvi. Corporation gas and electricity.  
xxviii. The corporation tramways.  
History and description of the services.

BELLAMY, C. R. Public transportation: with special reference to Liverpool tramways. Municipal Affairs, vi, 706-711 (1902).  
An historical account, with tables of statistics. Concludes that municipal ownership has been successful.

BLAKE, H. W. Contrast between company and municipal ownership and management of public utilities. Street Railway Journal, xxvi, 28-31 (1905).  
Considers the results of municipal ownership in Great Britain, and applies them to conditions in the United States.

BOYLE, JAMES. Municipal socialism in England. Municipal Journal and Engineer, xiv, 267-269 (1903).  
——— Municipal socialism in Great Britain. U. S. Consular Reports, lxix, no. 262, 375-385 (1902).  
An account of the municipal enterprises in various cities, public utilities being discussed only incidentally.  
——— Municipal Affairs, vi, 268-274 (1902).  
Reprint.  
——— Municipal Journal and Engineer, xii, 244-245; xiii, 9-10 (1902).  
A discussion of municipal trading in Liverpool, public utilities being treated only incidentally.

British Board of Trade. The financial position of tramway undertakings: owned and worked by municipal corporations as

indicated by the tramway and light railways return of the board of trade for 1908-1909. *Tramway and Railway World*, xxvii, 185-188 (1910).

An analysis of English municipal ownership statistics; with tables.

BROOKS, SYDNEY. Public ownership abroad. *Concerning Municipal Ownership*, vi, 229-231 (1913); vii, 157-160, 181-183 (1914).

BURDETT, E. W. The agitation for municipal ownership in the United States: its origin, meaning, and proper treatment. *Proc., National Electric Light Association*, 1906: vol. i, 537-555.

Includes an analysis of results of municipal ownership in Great Britain, which the writer believes less successful than commonly thought.

— Municipal ownership in Great Britain. *Journal of Political Economy*, xiv, 257-314 (1906).

An excellent and thorough study of results, with tables of statistics. The writer concludes that as a whole municipal ownership there has not been successful.

CHISHOLM, SAMUEL. Municipal enterprises. Glasgow, 1901.

70 pp.

Descriptive.

CLARK, W. J. British municipal tramway conditions. *Aera*, i, 658-664 (1913).

The writer concludes that British tramway fares are but little below ours, and without question unprofitable.

— British tramways. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. I, vol. i, 444-476.

A study of conditions and results of operation.

— The figures in the case. *Public Service*, iv, 89-94 (1908).

— Municipal ownership in Great Britain and in the United States. *Proc., American Street and Interurban Railway Association*, 1907: 271-284.

A comparison of English and American street railways, with analysis of results. The conclusions are strongly in favor of private operation.

COMMONS, J. R., and SULLIVAN, J. W. Labor and politics: British gas, electric supply and tramways. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 550-627.

— — — Labor and politics: gas, electric supply and tramways. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 1-112.

CRAWFORD, N. McD., and WOODWARD, J. H. Engineering matters: British tramways. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 453-474.

CRAWFORD, ROBERT. Glasgow's experience with municipal ownership and operation. *Annals of the American Academy of Political and Social Science*, xxvii, 1-19 (1906). Good descriptive, historical and critical account.

DANIELS, C. N. Municipal ownership in Sheffield. *U. S. Consular Reports*, no. 294, 64-67 (1905). A brief statistical analysis.

DARWIN, LEONARD. Municipal trade: the advantages and disadvantages resulting from the substitution of representative bodies for private proprietors in the management of industrial undertakings. New York, 1903. 464 pp.

An excellent analysis, with some discussion of results in Great Britain. Includes a few tables of statistics.

DAVIES, F. H. British central station rates. *Electrical World*, lv, 628-629 (1910).

A brief but interesting discussion of the various rates in use in England.

DONALD, ROBERT. The case for municipal trading. *Contemporary Review*, lxxxiii, 485-500, 623-639 (1903).

An answer to various arguments against municipal ownership in Great Britain, with an analysis of results. Includes tables of statistics.

— Recent attacks on municipal ownership in Great Britain. *Municipal Affairs*, vi, 579-613 (1902).

Historical and critical analysis, in answer to attacks on municipal ownership. Includes many tables of statistics.

DONALD, ROBERT. Street railways in British towns: municipal systems compared with company enterprises. *Municipal Affairs*, iv, 31-39 (1900).  
 A popular comparison of English municipal and private tramway operation, the conclusion being favorable to municipal ownership under British conditions of local government.

— Success of municipal ownership in Great Britain. *Street Railway Journal*, xxi, 30-35, 72-76 (1903).  
 An answer to statements by certain opponents of municipal ownership, with illustrative statistics.

FAIRLIE, J. A. Municipal activities in Great Britain. (*In Essays in municipal administration*. New York, 1908.) 287-302.  
 An historical discussion of municipal ownership in various cities.

FORSTALL, A. E. Brief history of gas legislation in Great Britain and extracts from acts applying the sliding scale and auction clauses. *Proc., American Gas Institute*, iv, 702-713 (1909).  
 Appendix to " 'Sliding scale' regulations of prices and rates of dividend for gas companies."

GARDINER, W. H., JR. The London sliding scale as a method for the government regulation of public service corporations. ?? 133 pp.

Glasgow (Corporation). Handbook on the municipal enterprises. Glasgow, 1904. 147 pp.  
 Gas: pp. 112-114.  
 Water: pp. 114-119.  
 Electricity: pp. 120-124.  
 Tramways: pp. 125-129.  
 On the history and present status of municipal ownership in Glasgow.

GUVOT, YVES. Where and why public ownership has failed. New York, 1914. 459 pp.  
 Operation of gas and electricity in the United Kingdom: pp. 127-135.  
 Tramways in Great Britain: pp. 136-150.

HALE, R. S. Municipal ownership in England: the British problem considered from an American viewpoint. *Cassier's Magazine*, xxxii, 3-11, 178-185, 237-249 (1907).  
 An analysis of the results of municipal ownership of various utilities.  
 The writer concludes that the municipal enterprises in England are well run but with little initiative.

HAMLEN, E. W. Glasgow and its municipal tramways. Moody's Magazine, ii, 652-655 (1906).  
*In* Municipal ownership and operation: symposium.  
A brief comparison of Glasgow and Boston traction, favoring private ownership.

HAMM, W. C. City-owned street cars. U. S. Consular Reports, no. 286, 121-125 (1904).  
A brief historical sketch and description of the tramways in Hull, illustrated with photographs.

— — — Engineering Record, 1, 173-176 (1904).

HOWE, F. C. The British city: the beginnings of democracy. New York, 1907. 370 pp.  
Ch. vi. The growth and extent of municipal trading.  
vii. The cities and the tramways.  
viii. The gas supply.  
ix. The electricity supply.  
The chapters listed give a popular survey of the history and management of municipal utilities in Great Britain. The writer favors municipal ownership.

— Does municipal ownership pay? (*In* The city: the hope of democracy. New York, 1906.) 136-157.  
A popular analysis of the results of municipal ownership in Great Britain, the writer favoring municipalization. Includes some tables of statistics.

— European cities at work. New York, 1913. 370 pp.  
Municipal ownership of the gas supply: pp. 328-333.  
Municipal transit in Great Britain: pp. 334-344.

— Municipal ownership in Great Britain. Bulletin of the Bureau of Labor, no. 62, 1-123 (1906).  
A thorough historical study and analysis; good. The writer favors municipalization.

JAMES, R. C., and TURNER, E. H. General remarks upon financial conditions. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 628-647.

JECKELL, J. A. The supply of cheap electrical energy for industrial purposes. Electrical Engineer, new series, xxxv, 707-710 (1905).  
Chiefly on the historical development of the electrical industry in Great Britain, and the desirability of a cheap supply of current. Includes tables and charts.

KLUMPP, J. B., and WINCHESTER, A. E. Engineering matters: British electricity supply works. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 292-382.

KNOOP, DOUGLAS. Principles and methods of municipal trading. London, 1912. 409 pp.  
A thorough critical and historical study.

LOWELL, A. L. Municipal trading. (*In The government of England.* 2d edition. New York, 1912.) ii, 233-267.  
A good general discussion of municipal trading, public utilities being treated only incidentally.

LYONS, B. F. Municipal ownership. *Progressive Age*, xxiv, 39-46 (1906).  
Discussion of method of studying results of existing municipal plants, with analyses of the results in Wheeling, Manchester and Sheffield for illustration.

— Municipal ownership of gas works. *Municipal Engineering*, xxx, 49-58 (1906).

MACASSEY, LYNDEN. Transportation facilities and street railway traffic in London. *Annals of the American Academy of Political and Social Science*, xxvii, 66-71 (1906).  
Brief description, with statistics.

MCKERROW, H. G. Some results in municipal ownership in Great Britain. *Arena*, xxxvii, 387-395 (1907).  
A popular analysis.  
For a reply, see Frank Parsons, "Mr. McKerrow's argument against municipal ownership."

MAHIN, F. W. Nottingham municipal tramway. *U. S. Consular Reports*, lxxiv, no. 280, 82 (1904).  
On the results of operation; the writer considers municipal operation highly successful.

MALTBY, M. R. Gas lighting in Great Britain. *Municipal Affairs*, iv, 538-573 (1900).  
A general historical study and analysis. Concludes that municipal ownership has been more successful than private.

— General history and legislation: British electricity supply works. (*In National Civic Federation. Municipal and pri-*

vate operation of public utilities. New York, 1907.) Pt. II, vol. ii, 248-291.

MALTBIE, M. R. General history and legislation: British gas works. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 113-161.

— General history and legislation: British tramways. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 383-452.

— Glasgow's municipal tramways. Municipal Affairs, iv, 40-59 (1900).

A brief description and analysis, with tables of statistics.

— Municipal and private management of gas and electricity in Great Britain. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. I, vol. i, 185-261.

A detailed analysis of results.

— A tale of two cities: water supply in London and Philadelphia. Municipal Affairs, iii, 193-214 (1899).

An historical and comparative study of the private supply in London and the municipal supply in Philadelphia, favoring municipal ownership; includes tables of statistics.

— Taxation of gas, electric supply and tramway undertakings in Great Britain. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 516-549.

MARSTON, GLENN. Municipal ownership in England. Public Service, xii, 45-46, 87-88, 187-188, 235-236 (1912).

General discussion, and history by cities. The writer concludes that municipal plants in England as a rule are failures both financially and as to service.

Massachusetts Legislature. The London sliding scale of prices and dividends as applied to gas companies. Boston, 1906. 85 pp.

Report of a special committee to the Massachusetts legislature.

MATTHEWS, NATHAN. Report on the London sliding scale. (*In* Gardiner, W. H., Jr. The London sliding scale as a method for the government regulation of public service corporations. ?, ?) 23-118.

MAWDESLEY, R. T. Municipal electricity supply at Johannesburg. Electrical Review (London), lxxviii, 89-91, 100-101, 153-155, 165-166 (1916).  
An engineering description, with photographs, diagrams and tables.

MEYER, H. R. Great Britain's lesson. Moody's Magazine, ii, 532-534 (1906).  
*In* Municipal ownership and operation: symposium.

— Municipal ownership in Great Britain. New York, 1906.  
340 pp.  
An historical and critical study. The author favors private ownership.

— — Journal of Political Economy, xiii, 481-505 (1905).  
An historical and analytical study, with tables of statistics. The writer opposes municipal ownership. Summary of several chapters of his book by the same title.

— — Public Service, xxi, 89-91 (1916).  
A brief selection from his book by the same title.

MINSHALL, T. H. London's electrical future. Fortnightly Review, lxxxix (new series, lxxxiii), 498-511 (1908).  
The history of the electrical supply of London, and its municipalization.

MOTT, BASIL, and HAY, DAVID. Underground railways in Great Britain. Trans., American Society of Civil Engineers, liv, part F, 325-348 (1904).  
Discussion: pp. 367-376. A technical engineering description, with many diagrams.

NEWBIGGING, WILLIAM, and KLUMPP, J. B. Engineering matters: British gas works. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 162-207.

OWEN, MARK. Public ownership and the increase of taxation in Great Britain. Concerning Municipal Ownership, vi, 152-156 (1913).

PARSONS, FRANK. British tramway history. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 699-747.

— British tramways. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. I, vol. i, 261-302.  
A detailed analysis of the results of operation.

— Glasgow's great record: a complete history of the pioneer experiment in municipal ownership of street car service in Great Britain. *Arena*, xxxii, 461-472 (1904).  
Popular account, with tables of statistics; favors municipal ownership.

— Mr. McKerrow's argument against municipal ownership. *Arena*, xxxvii, 396-400 (1907).  
A reply to H. G. McKerrow, "Some results in municipal ownership in Great Britain."

PEARSON, GEORGE. Municipal trading. *Electrical Engineer*, new series, xxiii, 753-757 (1899).  
An historical account and analysis with tables of statistics, and a statement of the arguments for and against municipalization. The writer favors municipal ownership.

PERKINS, F. C. Municipal electric railways at Wellington, New Zealand. *Electrical Review*, xl ix, 247-250 (1906).  
A description, illustrated with photographs.

PORTR, R. P. The dangers of municipal ownership. New York, 1907. 356 pp.  
An historical study of municipal ownership in Great Britain, with application of the conclusion to conditions in the United States.

— The dangers of municipal trading. London, 1907. 320 pp.  
An English reprint of "The dangers of municipal ownership," with two additional chapters.

— Failure of municipal ownership in England. *Street Railway Journal*, xx, 153-158, 310-314 (1902).

RIDER, J. H. Charges for supply from combined lighting and traction stations. *Electrical Engineer*, new series, xxxvi, 24-26 (1905).  
An analysis of costs, with tables of rates charged in various English cities.

ROYSE, C. A. Will public ownership increase or diminish political corruption? *Arena*, xxxviii, 373-384 (1907).

An historical sketch of political corruption in England from the earliest times. The writer concludes that public ownership of monopolies will decrease corruption.

SEABROOK, A. H. An English central station rate system. *Electrical World*, liv, 919-921 (1909).

A proposed schedule of electric rates for the Borough of St. Marylebone, with suggested tables of rates and discussion.

SMITHSON, R. A. Municipal operation of tramways: some points of a committee's policy. *Tramway and Railway World*, 1906: 339-341.

Discussion: pp. 341-347. On the municipal street railways of Leeds.

TAYLOR, BENJAMIN. Municipal Glasgow. *North American Review*, clxxxiv, 590-603 (1907).

A popular analysis of the good and bad points of the different municipal activities. Refers to other activities as well as public utilities operation.

— The municipal ownership of tramways in the United Kingdom. *Cassier's Magazine*, xvi, 381-388 (1899).

A popular analysis of municipal operation in various cities, with tables of statistics. The writer favors private ownership.

TOPPIN, W. A. The present tendency of charging for electricity. *Electrical Review* (London), lx, 945-947 (1907).

A discussion of the lack of uniformity of rates in English towns, with a tabulation of rates and reasons for the recent changes in each.

TOWLER, W. G. Socialism in local government. New York, 1909. 336 pp.

A popular study of the increase in municipal socialism in Great Britain, the writer opposing municipal trading.

TURNER, E. H., and JAMES, R. C. Financial matters: British gas works. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 208-247.

— — — Financial matters: British tramways. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 475-515.

WHITTEN, R. H. Regulation of public service companies in Great Britain: with supplemental chapters on the Boston sliding scale and Toronto auction sale and maximum dividend plans. New York, 1914. 231 pp.

Reprinted from 1913 Annual report of Public service commission for the first district, New York. An excellent study of the sliding scale.

WILKIE, J. E. Sidelights on London tramways. *Aera*, iii, 1077-1083 (1915).

WILLIAMS, E. E. How London loses by municipal ownership. *North American Review*, clxxxiii, 729-736 (1906).

WILSON, ALEXANDER. Presidential address: Institution of gas engineers, annual meeting, June, 1911. *Journal of Gas Lighting, Water Supply, and Sanitary Improvement*, cxiv, 725-734 (1911).

A very good historical sketch of the Glasgow gas works under private and municipal management, and an engineering description of the plant. Includes diagrams and tables of statistics.

YERBURY, H. E. Equitable charges for tramway supply. *Journal of the Institution of Electrical Engineers*, xliv, 576-600 (1910).

Discussion: pp. 606-663. Includes tables of rates charged in Great Britain, and charts.

— — — Tramway and Railway World, xxvii, 108-111 (1910).

Discussion: pp. 111-112. Abstract.

#### ITALY

BACHI, RICCARDO. Public gas works in Italy. *Municipal Affairs*, iv, 595-605 (1900).

A brief historical account, various cities being discussed separately.

FAIRLIE, J. A. Municipal government in Italy. (*In Essays in municipal administration*. New York, 1908.) 330-349.

Includes a very brief discussion of public utilities and municipal ownership in various cities.

MAGRINI, EFFREN. Milan street railways. *Municipal Affairs*, vi, 116-123 (1902).

A description of the Milan system of municipal ownership and private operation, which is asserted to be a success. Includes tables of statistics.

SEMENZA, GUIDO. Methods of charging for electric motive power. Proc., National Electric Light Association, 1907: vol. i, 520-532.

On the methods in use in Italy; technical, with formulae and charts.

#### JAPAN

KATAGIRI, YOSHIO. Municipal electric road of Osaka. Municipal Journal and Engineer, xxvi, 171-173 (1909).

A brief description of the only municipal street railway in Japan; illustrated with a map and photographs.

TSUKAMOTO, C. Hydroelectric power from snow clad Fujiyama. Electrical World, lxvi, 910-913 (1915).

Description, illustrated with photographs, of one of the electric systems supplying Tokio.

#### SPAIN

JONES, C. L. Madrid: its government and municipal services. Annals of the American Academy of Political and Social Science, xxvii, 120-131 (1906).

Public utility services form only a part of the article; chiefly descriptive.

#### SWEDEN

ANDREASON, E. Substation of Stockholm municipal system. Electrical World, lxi, 1305-1308 (1913).

Description of plant and operating features, illustrated with photographs.

#### SWITZERLAND

LIEBERKNECHT, A. Development of Zurich tramways. U. S. Consular Reports, lxv, no. 245, 236-237 (1901).

### III. FRANCHISES

#### GENERAL WORKS

ADAMS, A. D. Street lighting contracts. *Municipal Journal and Engineer*, xxiii, 630-631 (1907).

AYLESWORTH, M. H. Franchises and public welfare. *Aera*, iv, 545-547 (1916).  
Elementary.

BAKER, M. N. Municipal franchises and contracts. (*In Municipal engineering and sanitation*. New York, 1902.) 264-274.  
Brief, elementary discussion of principles.

BRADY, A. W. Some phases of the franchise question. *Aera*, i, 930-939 (1913).

A good general discussion of franchises and length of term.

BRADY, J. E. Gas franchises and privileges: their legal characteristics and constructions which the courts have placed upon them. *American Gas Light Journal*, xcii, 1179-1182; xciii, 51-52 (1910).

BREEN, I. R. A municipal franchise is a valuable asset and should be so treated by those in authority. *Proc., American Society of Municipal Improvements*, 1908: 27-33.

BURGESS, PHILIP. Points of difference in waterworks franchises. *American City*, xii, 318-320 (1915).

A popular discussion of provisions that may be included in renewals of waterworks franchises.

COOPER, H. S. Franchises. *Street Railway Review*, xi, 304-305, 364-365, 409-410, 570-571 (1901).

A general discussion of franchises, methods of granting and provisions; very popular.

— “Special privilege.” *Public Service*, xvi, 143-145 (1914).  
Elementary.

DEWEY, D. R. Legal aspects of corporation franchises. (*In McLaughlin, A. C., and Hart, A. B. Cyclopedias of American government. New York, 1914.*) ii, 45-48.

DICKERMAN, J. C. Standards of service clauses in street lighting contracts. *Utilities Magazine*, i, no. 2, 2-7 (1915).  
An elementary discussion of the various contracts now in use.

DICKEY, C. H. Obligations imposed by the possession of a franchise. *Proc., American Gas Institute*, ii, 289-302 (1907).  
Discussion: pp. 302-306. Elementary.

DUNKEL, J. H. The municipality and the company. *Public Service*, xv, 11-12 (1913).  
Discussion of franchise and politics; popular.

ELLIOTT, E. L. Indefinite candle power in municipal contracts. *Proc., National Electric Light Association*, 1907: vol. i, 246-252.  
Discussion: pp. 263-287. On the misunderstandings caused by indefinite standards in the contracts and the need for greater exactness.

FLOY, HENRY. Indefinite obligations in municipal contracts. *Proc., National Electric Light Association*, 1907: vol. i, 254-257.  
Discussion: pp. 263-287. On the need for definiteness in contract requirements, and for maintaining sufficient records to prevent misunderstandings.

FOOTE, A. R. Economic aspects of municipal franchises. *Electrical Review*, xxxvi, 210-213 (1900).  
A very general and elementary discussion.

— How should the franchise question be settled? (*In Municipal public service industries. Chicago, 1899.*) 5-86.

FOSTER, H. A. Franchise. (*In Engineering valuation of public utilities and factories. New York, 1912.*) 236-251.  
A good discussion of franchises and their terms, franchise valuation and taxation; with many quotations from court and commission decisions.

GASKILL, D. L. The relation of electric light companies to municipalities from a legal standpoint. *Electrical Review*, xxxix, 412-414 (1901).  
Abstract. Consists chiefly of a popular discussion of franchises.

HIGGINS, E. E. Municipal and private management of street railways: a study of results and possibilities. *Municipal Affairs*, i, 458-490 (1897).

A long, popular discussion, with tables and diagrams. The writer is strongly opposed to municipal ownership, and favors profit sharing and other contractual regulations.

KEALY, P. J. Municipal coöperation in public utility management. *Trans., American Institute of Electrical Engineers*, xxxiv, 2533-2544 (1915).

Discussion: pp. 2545-2548. Considers the various possible forms of payment by the utility to the city.

— Municipal coöperation in utility management. *Electric Railway Journal*, xlvi, 861-863 (1915).

Abstract.

KING, C. L. Franchise essentials. (*In* *The regulation of municipal utilities*. New York, 1912.) 75-98.

MCLEAN, GEORGE. Theory of public utility franchises. *Electric Railway Journal*, xlvii, 899-900 (1916).

Abstract. A very general, popular discussion.

— — — Public Service, xx, 166-168 (1916).

MATTHEWS, NATHAN. Relations with public service corporations. (*In* *Municipal charters*. Cambridge, 1914.) 43-49.

A good elementary discussion of franchise terms and the necessary city charter provisions.

MEAD, E. S. Financial aspects of corporation franchises. (*In* McLAUGHLIN, A. C., and HART, A. B. *Cyclopedia of American government*. New York, 1914.) ii, 44.

PETERS, J. W. S., and WILCOX, D. F. Outline of sections for a model street railway franchise. (*In* BEARD, C. A. *American city government*. New York, 1912.) 389-393.

Report of a committee of the National municipal league.

A general discussion of franchise provisions with recommendations.

— A suggested sliding scale of dividends for street railways, determined by quality of service. *National Municipal Review*, ii, 31-38 (1913).

Very interesting and novel; includes illustrative tables.

POPE, HERBERT. Municipal contracts and the regulation of rates. *Harvard Law Review*, xvi, 1-21 (1902).  
On the validity and effect of contract and franchise provisions as to rates.

ROWE, L. S. The relation of the city to public utilities. (*In Problems of city government*. New York, 1908.) 208-240.  
A good elementary discussion, with some reference to franchise terms and provisions.

SPENCER, A. W. Should public franchises be treated as corporate property? *Annals of the American Academy of Political and Social Science*, xxix, 352-356 (1907).

WESTON, C. V. Street railway franchises. *Proc., American Street and Interurban Railway Association*, 1910: 254-263.  
Discussion: pp. 263-269. General discussion of franchise provisions.  
— — — Electric Railway Journal, xxxvi, 813-815 (1910).  
Abstract.

WHINERY, SAMUEL. Quasi-public corporations and their control. (*In Municipal public works: their inception, construction and management*. New York, 1903.) 219-241.  
An elementary discussion of franchises and their terms and conditions.

WILCOX, D. F. The control of public utilities. (*In The American city: a problem in democracy*. New York, 1911.) 52-90.  
A very good elementary discussion of franchises and their terms and requirements, and of municipal ownership. The writer favors municipal ownership as a theory, but believes proper franchise control to be better for the present.  
— Elements of a constructive franchise policy. *Proc., National Conference for Good City Government*, 1910: 170-189.  
A good account of traction franchise history in New York City and discussion of a proposed franchise policy.  
— — — (*In KING, C. L. The regulation of municipal utilities*. New York, 1912.) 137-164.  
Revised reprint.

— Franchise provisions in commission charters and statutes. *Annals of the American Academy of Political and Social Science*, xxxviii, 783-797 (1911).  
Good elementary discussion.

WILCOX, D. F. How to make a study of local utility franchises.  
American City, x, 326-329 (1914).

A popular account of franchises and their provisions with suggestions for a franchise survey.

— Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities. New York, 1910-1911. 2 vols.

Vol. I. Introductory: pipe and wire franchises.

Ch. i. How franchise rights are acquired.

ii. What a franchise signifies.

iii. Monopoly profits, and ways of limiting them.

iv. Injuries to individuals, and ways of preventing them.

v. Temptations to public wrong, and ways of overcoming them.

vi. Electric light, heat and power as a public utility.

vii. Franchise conditions imposed on electric light and power companies.

xii. Electrical conduits.

xiii. Waterworks and water supply franchises.

xix. Artificial and natural gas as public utilities.

xx. Gas franchises where only artificial gas is available.

xxi. Gas franchises in cities within reach of natural gas fields.

Vol. II. Transportation franchises: taxation and control of public utilities.

Ch. xxii. The street railway as a factor in modern life.

xxiii. Elements of a model street railway franchise.

xxiv. Street railway franchises in greater New York.

xxv. The street railway settlement franchises of Chicago and Cleveland.

xxvi. Street railway franchises that are perpetual.

xxvii. Street railway franchises that are indeterminate.

xxviii. Exclusive street railway franchises.

xxix. Street railway franchises granted for compensation.

xxx. Low fare street railway franchises.

xxxi. Miscellaneous street railway franchises.

xxxii. Franchises for elevated railways.

xxxiv. Interurban railway franchises.

xxxix. Constitutional and statutory limitations affecting local franchise grants.

xl. The initiative and referendum in franchise matters.

xli. Supervision of local utilities by state commissions.

xlii. Local utility departments, franchise bureaus and special experts.

xliv. Compensation for franchises and taxation of public utility properties.

Ch. xlv. Capitalization, capital value, appraisals and purchase price.

xlvi. Municipal ownership.

Appendix: Minneapolis gas settlement ordinances.

An excellent and exhaustive treatise, in popular form, on all franchise problems. Includes a discussion of the franchises in force in practically all important American cities.

**WILCOX, D. F., and PETERS, J. W. S.** Suggestions for a model street railway franchise. (*In KING, C. L. The regulation of municipal utilities. New York, 1912.*) 165-181.

Discusses the relation of the agency theory to valuation.

— What a street railway franchise should contain. *American City*, vii, 129-132 (1912).

Abstract. A good brief outline of essential franchise provisions.

## HISTORY

### UNITED STATES AND FOREIGN

**CURTIS, C. E.** Street railways and their relation to the public. *Yale Review*, vi, 17-36 (1897).

A very good, early review of comparative franchise and municipal ownership history in the United States, Canada and Great Britain.

**MALTBIE, M. R.** Report on the indeterminate franchise for public utilities. New York, 1908. 34 pp.

Report submitted to the New York public service commission for the first district.

An excellent summary of the arguments for and against perpetual, term and indeterminate franchises. Includes a discussion of the experience with the indeterminate permit of Massachusetts, Wisconsin, Chicago, Washington, D. C., Porto Rico, Philippines and New York City.

### UNITED STATES — GENERAL

American Academy of Political and Social Science. Municipal ownership and municipal franchises. *Annals of the American Academy of Political and Social Science*, xxvii, no. 1 (1906).

258 pp.

For contents, see p. 334.

**BEARD, C. A.** Franchises and public utilities. (*In American city government. New York, 1912.*) 190-217.

On the former corrupt practices with regard to utility franchises, and franchise principles.

BROWN, C. C. A modern franchise for a public service corporation. *Municipal Engineering*, xlviii, 89-93 (1915).

A résumé of the conditions in a new franchise in "a small city."

DURAND, E. D. Street railway franchises, public regulation and public ownership in the United States of America. *Royal Commission on London Traffic*, iv, 593-609 (1906).

Comprehensive discussion and tabulation of the laws of various states.

FAIRLIE, J. A. Recent extensions of municipal functions in the United States. *Annals of the American Academy of Political and Social Science*, xxv, 299-310 (1905).

Franchises: pp. 308-310.

Brief account of recent municipal ownership and franchise history in the United States.

— Recent legislation on municipal functions in the United States. (*In Essays in municipal administration*. New York, 1908.) 145-163.

Franchises and public control: pp. 158-163.

Revised from his article entitled "Recent extensions of municipal functions in the United States."

HODGKINS, H. C. Franchises of public utilities as they were and as they are. *Journal of the American Waterworks Association*, ii, 739-758 (1915).

A very interesting study, giving a brief review of franchise history, tables of the terms of franchises in each state and of the kinds of utilities coming under the jurisdiction of the various commissions, with discussion.

U. S. Bureau of the Census. Central electric light and power stations, 1902. Washington, 1905. 175 pp.

Franchises: pp. 82-85.

— Street and electric railways, 1902. Washington, 1905. 439 pp.

Franchises, public regulation and public ownership: pp. 126-148.

— Street and electric railways, 1907. Washington, 1910. 575 pp.

Franchises, public regulation and public ownership: pp. 291-299.

WILCOX, D. F. *Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities.* New York, 1910-1911. 2 vols.

An exhaustive treatise, in popular form, including an account of the franchises in force in practically all important American cities. For list of chapters, see p. 131.

#### CALIFORNIA

PLEHN, C. C. *The taxation of franchises in California.* National Municipal Review, i, 337-354 (1912).

A good historical and critical account.

#### *San Francisco*

ARNOLD, B. J. *Foundation principles in valuation.* Electric Railway Journal, xliv, 713-719, 803-806 (1915).

Abstract.

— *Foundation principles of utility valuation with special application to plans for resettlement.* Aera, iv, 189-214 (1915).

Abstract.

— *Foundation principles of utility valuation with special application to resettlement plans.* Proc., American Electric Railway Association, 1915: 139-187.

Discussion: pp. 188-198. Notes on San Francisco traction resettlement: pp. 176-178; with a chart.

— *Franchise and legal matters.* (*In Report on the improvement and development of the transportation facilities of San Francisco.* San Francisco, 1913.) 359-410.

— *Report on legal and franchise matters, charter amendments to the Board of supervisors, city of San Francisco.* ?, 1912. 28 pp.

#### COLORADO

#### *Denver*

KING, C. L. *The history of the government of Denver, with special reference to its relations with public service corporations.* Denver, 1911. 322 pp.

## ILLINOIS

*Chicago*

ARNOLD, B. J. Foundation principles in valuation. *Electric Railway Journal*, xlvi, 713-719, 803-806 (1915).  
Abstract.

— Foundation principles of utility valuation with special application to plans for resettlements. *Aera*, iv, 189-214 (1915).  
Abstract.

— Foundation principles of utility valuation with special application to resettlement plans. Proc., American Electric Railway Association, 1915: 139-187.  
Discussion: pp. 188-198. Notes on Chicago traction resettlement: pp. 169-173; with charts.

—, FLEMING, H. B., and WESTON, GEORGE. Phases in the development of the street railways of Chicago. *Journal of the Western Society of Engineers*, xiv, 641-668 (1909).  
A brief historical sketch, by B. J. Arnold: pp. 641-646.

FAIRLIE, J. A. The Chicago street railways: a supplementary note. *Quarterly Journal of Economics*, xxii, 476-479 (1908).  
Supplementary to "The street railway question in Chicago."

— The street railway question in Chicago. *Quarterly Journal of Economics*, xxi, 370-403 (1907).  
A thorough historical study.

— (In *Essays in municipal administration*. New York, 1908.) 230-261.  
Reprint.

FAY, C. N. The city gets fifty-five per cent. *Outlook*, xcii, 407-413 (1909).  
A very popular account of the Chicago traction settlement, by which 55 per cent of gross earnings are paid to the city.

HEILMAN, R. E. The Chicago subway problem. *Journal of Political Economy*, xxii, 992-1005 (1914).  
A discussion of recent subway franchise history in Chicago.

— Chicago traction: a study of the efforts of the public to secure good service. *Publications, American Economic Association*, 3d series, ix, 313-443 (1908).  
Thorough historical study of the history of Chicago traction, franchises and the municipal ownership movement.

*Chicago*—continued.

HOTCHKISS, W. E. Chicago traction: a study in political evolution. *Annals of the American Academy of Political and Social Science*, xxviii, 385–404 (1906).

Treats of the history of traction franchises in Chicago, largely from a government student's viewpoint.

— Recent phases of Chicago's transportation problem. *Annals of the American Academy of Political and Social Science*, xxxi, 85–95 (1908).

Franchise history in 1907. Supplementary to his "Chicago traction: a study in political evolution."

MILLIS, H. A. The present street railway situation in Chicago. *Annals of the American Academy of Political and Social Science*, xx, 356–367 (1902).

Chiefly franchise history.

OSSOSKI, SIDNEY. The Chicago plan of street railway supervision and control. *Electric Railway Journal*, xxxvi, 218–220 (1910).

A critical account of the franchise and ordinance provisions.

SIKES, G. C. Chicago's struggle for freedom from traction rule. *Outlook*, lxxxii, 748–753 (1906).

TOLMAN, E. B. Chicago's traction question. *World Today*, ix, 1181–1187 (1905); x, 637–645 (1906).

A full popular account of traction franchise history in Chicago; illustrated with photographs.

WILCOX, D. F. How the Chicago and Cleveland street railway settlements are working out. *National Municipal Review*, i, 630–638 (1912).

A good analysis.

— — — Engineering News, lxviii, 526–529 (1912).

— The street railway settlement franchises of Chicago and Cleveland. (*In Municipal franchises*. New York, 1911.) ii, 141–191.

A thorough historical study.

*Lake Forest*

**ALVORD, J. W.** A coöperative waterworks franchise. Proc., American Waterworks Association, xxx, 110-118 (1910).

Discussion: pp. 118-122. An account of the main features of an ordinance in Lake Forest. A part of the net profits go to a sinking fund for municipal purchase of the property.

## INDIANA

*Crawfordsville*

**BROWN, C. C.** Some new provisions in a proposed franchise for a municipal public service corporation. Proc., American Society of Municipal Improvements, 1909: 274-288.

A reprint of the franchise ordinance, with some discussion.

*Indianapolis*

**BROWN, C. C.** How a private gas company at Indianapolis is controlled in the public interest. Engineering News, lx, 674-675 (1908).

Abstract.

— A modern municipal franchise. Proc., American Society of Municipal Improvements, 1908: 20-26.

On the franchise of the Citizens' gas company.

— — — Municipal Engineering, xxxv, 306-309 (1908).

Abstract.

## IOWA

*Des Moines*

**HANNA, J. R.** Des Moines' street railway franchise. Utilities Magazine, i, no. 6, 25-26 (1916).

On franchise litigation.

## MASSACHUSETTS

**ALLEN, W. S.** Street railway franchises in Massachusetts. Annals of the American Academy of Political and Social Science, xxvii, 91-110 (1906).

Detailed historical account.

*Boston*

PINANSKI, A. E. The street railway system of metropolitan Boston. New York, 1908. 58 pp.

History of traction franchises; a thorough study.

WOODS, R. A., and EASTMAN, J. B. The Boston franchise contest. *Outlook*, lxxxii, 835-841 (1906).

## MICHIGAN

*Detroit*

DAVIS, R. K. The street railway situation in Detroit, Mich. Proc., American Society of Municipal Improvements, 1906: 157-163.

An historical sketch.

LEAKE, PAUL. The street railway situation in Detroit. Proc., National Conference for Good City Government, 1910: 120-141.

A good review of franchise history and terms.

WILCOX, D. F. The control of public service corporations in Detroit. *Annals of the American Academy of Political and Social Science*, xxxi, 42-58 (1908).

Largely historical, with considerable franchise discussion.

## MINNESOTA

*Minneapolis*

JONES, S. P. Minneapolis gas settlement. Proc., National Conference for Good City Government, 1910: 142-155.

A popular historical account.

— The Minneapolis gas settlement: a typical struggle for a city's rights. (*In* KING, C. L. *The regulation of municipal utilities*. New York, 1912.) 56-72.

Revised reprint.

WILCOX, D. F. Minneapolis gas settlement ordinances. (*In* Municipal franchises. New York, 1911.) ii, 811-832.

A reprint of the franchise and regulatory ordinances of 1910.

## MISSOURI

*Kansas City*

ARNOLD, B. J. Foundation principles in valuation. *Electric Railway Journal*, xlvi, 713-719, 803-806 (1915).  
Abstract.

— Foundation principles of utility valuation with special application to plans for resettlement. *Aera*, iv, 189-214 (1915).  
Abstract.

— Foundation principles of utility valuation with special application to resettlement plans. Proc., American Electric Railway Association, 1915: 139-187.  
Discussion: pp. 188-198. Notes on Kansas City traction valuation and resettlement: pp. 167-168 and 174-175; with charts.

KEALY, P. J. The partnership provisions of the Kansas City franchise. *Electric Railway Journal*, xliv, 691-694 (1914).

MUNAGLE, F. J. The Kansas City settlement. *Aera*, iii, 19-23 (1914).

PETERS, J. W. S. Kansas City franchise fight. Proc., National Conference for Good City Government, 1910: 156-169.

## NEW YORK

*New York*

BOWKER, R. R. The piracy of public franchises. *Atlantic Monthly*, lxxxviii, 463-482 (1901).  
A popular historical account of franchise granting in New York City.

— — — Municipal Affairs, v, 886-904 (1901).  
Reprint.

MALTBIE, M. R. Analysis of the rapid transit contracts between the city of New York and the Interborough rapid transit company, and the N. Y. municipal railway corporation. New York? 1913. 25 pp.  
Report to the New York public service commission for the first district.

— A century of franchise history. *Municipal Affairs*, iv, 194-206 (1900).  
A summary appended to Gustavus Myers, "History of public franchises in New York City."

*New York* — continued.

MALTBIE, M. R. Franchises of electrical corporations in greater New York. New York, 1911. 237 pp.

Report to the New York public service commission for the first district. A very complete, classified study.

— A rapid transit policy for greater New York. Proc., National Conference for Good City Government, 1909: 390-402.

An historical sketch, with discussion of the work of the rapid transit commission.

— (In KING, C. L. The regulation of municipal utilities. New York, 1912.) 120-136.

Revised reprint.

MURPHY, J. J. Franchise grants in New York City. Annals of the American Academy of Political and Social Science, xxxi, 78-84 (1908).

Historical and very general.

MYERS, GUSTAVUS. History of public franchises in New York City. Municipal Affairs, iv, 71-193 (1900).

An extensive, popular account, arranged by classes of utilities; with tables of statistics.

Includes a long summary by M. R. Maltbie, entitled "A century of franchise history" (pp. 194-206).

NICHOLS, H. P. Progress in methods of granting franchises in New York City. Philadelphia? 1907. 24 pp.

WEST, MAX. The franchises of greater New York. Yale Review, vi, 387-408 (1898).

A very good elementary account of franchise history in New York, with critical comments.

— Municipal franchises in New York. (In BEMIS, E. W. Municipal monopolies. 4th edition. New York, 1904.) 365-422.

Historical account, by class of utilities.

WILCOX, D. F. Elements of a constructive franchise policy. Proc., National Conference for Good City Government, 1910: 170-189.

A good account of traction franchise history in New York City and discussion of a proposed franchise policy.

*New York*—continued.

WILCOX, D. F. Elements of a constructive franchise policy. (*In KING, C. L. The regulation of municipal utilities. New York, 1912.*) 137-164.  
Revised reprint.

— The New York subway contracts. *National Municipal Review*, ii, 375-391 (1913).  
Franchise history and provisions.

— Report upon proposed standard form of franchise for street railroad companies. *New York*, 1909. 26 pp.  
Report submitted to the New York public service commission for the first district.

— Street railway franchises in greater New York. (*In Municipal franchises. New York, 1911.*) ii, 101-140.  
A thorough historical study.

WRIGHT, H. C. Development of transit control in New York City. *Annals of the American Academy of Political and Social Science*, xxxi, 18-41 (1908).  
Good for franchise history, by periods, from 1850 to date.

## OHIO

### *Cleveland*

BEMIS, E. W. The Cleveland street railway settlement. *Quarterly Journal of Economics*, xxiv, 550-560 (1910).

— The franchise situation and the referendum in Cleveland. *Proc., National Conference for Good City Government*, 1902: 194-207.

— — — *Municipal Affairs*, vi, 261-267 (1902).  
Reprint.

— The street railway settlement in Cleveland. *Quarterly Journal of Economics*, xxii, 543-575 (1908).  
An excellent analysis of the Taylor settlement.

DAVIES, H. J. Some accounting features of the Cleveland railway company's franchise. *Proc., American Street and Interurban Railway Accountants' Association*, 1910: 125-150.  
Discussion: pp. 150-154. Of accounting interest only; includes many tables.

*Cleveland* — continued.

DOOLITTLE, F. W. *The Cleveland experiment. (In Studies in the cost of urban transportation service.)* New York, 1916.) 355-438.

An excellent study of the history of Cleveland traction franchises and fare experiments.

DUFFY, C. N. *The Cleveland railway situation. Proc., American Electric Railway Association, 1913:* 110-123.

An excellent analysis of the ordinance and conditions in Cleveland.

— — — *Aera, ii, 350-362 (1913).*

Reprint.

— — — *Economics of the Cleveland railway situation as developed in the 1913 arbitration decision. Electric Railway Journal, xlvi, 770-773 (1913).*

Abstract.

HAYDEN, W. S. *The street railway situation in Cleveland. Proc., National Conference for Good City Government, 1909:* 403-416.

An historical account.

NASH, L. R. *The Cleveland railway situation. Stone and Webster Journal, xviii, 124-158 (1916).*

History and analysis, with data, map and charts.

SIDLO, T. L. *Cleveland invalidity clause: a new development in public utilities ordinances. Journal of Political Economy, xix, 124-128 (1911).*

A brief account of the clause which provides that if any of the rates or provisions of the franchise are declared invalid, the corresponding power is to be in the city council. Includes a reprint of the franchise section.

WILCOX, D. F. *How the Chicago and Cleveland street railway settlements are working out. National Municipal Review, i, 630-638 (1912).*

A good analysis.

— — — *Engineering News, lxviii, 526-529 (1912).*

Abstract.

*Cleveland* — continued.

WILCOX, D. F. The street railway settlement franchises of Chicago and Cleveland. (*In Municipal franchises. New York, 1911.*) ii, 141-191.

A thorough historical study.

WILSON, H. W. Three cent light in Cleveland. New York, 1914.  
11 pp.

History and analysis of results of municipal ownership in Cleveland.

*Springfield*

RINKLIFF, G. L. Springfield's street railway franchise. *Municipal Journal and Engineer*, xxxiv, 578-579 (1913).

## PENNSYLVANIA

*Philadelphia*

LEWIS, E. O. Philadelphia's relation to rapid transit company. *Annals of the American Academy of Political and Social Science*, xxxi, 600-611 (1908).

A discussion of the contract of 1907.

MC LAIN, F. D. The street railways of Philadelphia. *Quarterly Journal of Economics*, xxii, 233-260 (1908).

A good historical treatment of the subject.

WOODRUFF, C. R. Philadelphia street railway franchises. *American Journal of Sociology*, vii, 216-233 (1901).

Historical discussion of corruption in traction franchise granting.

## WISCONSIN

ERICKSON, HALFORD. The indeterminate franchise or permit. *Electrical Review and Western Electrician*, lxv, 224-227, 283-285 (1914).

A general discussion of the indeterminate permit and the history of its use in Wisconsin.

HOLMES, F. L. The indeterminate permit and convenience and necessity laws. (*In Regulation of railroads and public utilities in Wisconsin. New York, 1915.*) 221-236.

A good annotated account of the use of the indeterminate permit by the Wisconsin commission.

MORGAN, W. O. The indeterminate permit as a satisfactory franchise. *Annals of the American Academy of Political and Social Science*, xxxvii, 142-159 (1911).  
 Discussion of the Wisconsin experience for illustration.

MORTIMER, J. D. The Wisconsin indeterminate permit law. *Aera*, ii, 7-20 (1913).  
 A good analysis of the law, including a reprint of the statutory provisions and excerpts from court decisions.

#### *Milwaukee*

DOOLITTLE, F. W. The Milwaukee experiment. (*In Studies in the cost of urban transportation service*. New York, 1916.) 439-467.  
 An excellent study of traction franchise and fare history in Milwaukee.

#### CANADA

CANNON, L. A. Electric franchises. *Canadian Engineer*, xxiii, 383-385 (1912).  
 A brief sketch of franchise history in Quebec.

#### FRANCE

WHITTEN, R. H. The Paris subway system: with special reference to franchise terms and conditions. *Engineering News*, lxv, 70-75 (1911).  
 An excellent description; includes a map.

#### LENGTH OF TERM

ARKWRIGHT, P. S. The length of franchise. *Stone and Webster Public Service Journal*, xii, 388-393 (1913).

BRADY, A. W. Some phases of the franchise question. *Aera*, i, 930-939 (1913).

A good general discussion of franchises and length of term.

ERICKSON, HALFORD. The advantages of state regulation. *Annals of the American Academy of Political and Social Science*, lvii, 123-162 (1915).

Excellent general article on commission regulation and its problems.

ERICKSON, HALFORD. The indeterminate franchise or permit. Electrical Review and Western Electrician, lxv, 224-227, 283-285 (1914).  
A general discussion of the indeterminate permit and the history of its use in Wisconsin.

FOSTER, H. A. Franchise. (*In* Engineering valuation of public utilities and factories. New York, 1912.) 236-251.  
Includes a brief discussion of franchise terms.

HODGE, W. H. Long term franchise grants. Public Service, viii, 37-39 (1910).

HOLMES, F. L. The indeterminate permit and convenience and necessity laws. (*In* Regulation of railroads and public utilities in Wisconsin. New York, 1915.) 221-236.  
A good elementary discussion of franchise terms and the advantages of the indeterminate permit.

LEWIS, C. T. Duration of franchises. Municipal Affairs, iii, 256-263 (1899).  
On the question of whether perpetual franchises are desirable.

MALTBIE, M. R. Report on the indeterminate franchise for public utilities. New York, 1908. 34 pp.  
Report submitted to the New York public service commission for the first district.  
An excellent summary of the arguments for and against perpetual, term and indeterminate franchises. The writer favors the indeterminate permit.

MORGAN, W. O. The indeterminate permit as a satisfactory franchise. Annals of the American Academy of Political and Social Science, xxxvii, 142-159 (1911).  
Discussion of the Wisconsin experience for illustration.

MORTIMER, J. D. The Wisconsin indeterminate permit law. Aera, ii, 7-20 (1913).  
A good analysis of the law, including a reprint of the statutory provisions and excerpts from court decisions.

NORTON, W. J. Effects of the indeterminate franchise under state regulation. Annals of the American Academy of Political and Social Science, liii, 135-147 (1914).  
A good, annotated account of the law and the experience of various states.

ROWE, L. S. The relation of the city to public utilities. (*In Problems of city government.* New York, 1908.) 208-240.  
A good elementary discussion, with some reference to franchise terms.

SIKES, G. C. The question of franchises. *Atlantic Monthly*, xcii, 408-415 (1903).  
A popular argument for the indeterminate permit.

WETTERER, C. F. W. The desirability of indeterminate instead of fixed term franchises. *Stone and Webster Journal*, xciii, 19-23 (1916).  
A good elementary article.

WHINERY, SAMUEL. Quasi-public corporations and their control. (*In Municipal public works: their inception, construction and management.* New York, 1903.) 219-241.  
Includes a brief discussion of franchise terms.

WILCOX, D. F. The control of public utilities. (*In The American city: a problem in democracy.* New York, 1911.) 52-90.  
Includes a very brief reference to franchise terms.

— Municipal home rule and public utility franchises. *National Municipal Review*, iii, 13-27 (1914).  
Report of a committee of the National municipal league.  
A good discussion of the advantages of term franchises and the dangers of the indeterminate permit where municipal purchase is requisite for termination of the grant.

## IV. PUBLIC SERVICE COMMISSIONS

### GENERAL WORKS

**ALLISON, J. E.** Work of public service commissions. *Public Service*, xii, 98-101 (1912).

Elementary.

**BAUER, JOHN.** The control of return on public utility investments. *Political Science Quarterly*, xxxi, 260-288 (1916).

Purpose: "to point out the fundamental difficulties in present procedure and to suggest how they may be reasonably overcome." Excellent.

**BEALE, J. H., and WYMAN, BRUCE.** Railroad rate regulation: with special reference to the powers of the Interstate commerce commission under the acts to regulate commerce. New York, 1906. 2d edition, 1915. 1210 pp.

Book IV. Powers of the commission.

Ch. xxi. Supervisory powers of the commission.

xxii. Quasi-judicial functions of the commission.

xxiii. Procedure before the commission.

xxiv. Judicial review of commission action.

An excellent, thoroughly annotated legal analysis. Refers only to the Interstate commerce commission, but is of some interest for all public utilities.

**BEARD, C. A.** Commissions in American government. (*In* McLAUGHLIN, A. C., and HART, A. B. *Cyclopedia of American government*. New York, 1914.) i, 350-354.

Includes a description of the powers and duties of public service commissions.

**BETTS, PHILANDER.** Organization of a public service commission. *Aera*, iv, 95-98 (1915). Good; elementary.

**BUSBY, L. A.** Regulation of public utilities. *Journal of the Western Society of Engineers*, xxi, 33-51 (1916).

Discussion: pp. 51-54. A very popular article, of interest chiefly for its discussion of requirements for success in commission regulation.

BUSBY, L. A. Regulation of public utilities. *Aera*, iv, 515-533 (1916).  
Reprint.

— — — Electric Railway Journal, xlvi, 1081-1084 (1915).  
Abstract.

CLARK, F. C. State railroad commissions and how they may be made effective. *Publications, American Economic Association*, vi, 473-582 (1891).  
History with discussion. Includes tables of the organization, powers and duties of the commissions.

CROSBY, O. T. Public policies and public utilities. *Public Service*, xiv, 49-52, 65-66 (1913).  
On the six possible relationships between the company and the public, need for greater coöperation and for more certainty as to return to be allowed and the results of regulation.

DAWES, R. C. Regulation by commission. *Progressive Age*, xxvii, 348-350 (1909).  
— Regulation of utility corporations. *Public Service*, ix, 78-80, 88-89 (1910).  
Opposes commission control and defends watered stock.

DUNCAN, C. S. The paternalism of public service commissions. *Forum*, liii, 101-106 (1915).

DUNN, S. O. Fair regulation of railroads. *North American Review*, cxci, 185-194 (1910).  
Popular; of some general interest.

— The state railway commissions. *Railroad Age Gazette*, xlvi, 123-125 (1909).  
A tabular analysis of the personnel of the various railroad commissions (previous experience, salary, terms, etc.), with discussion.

ERICKSON, HALFORD. Regulation or profit-sharing? *Electric Railway Journal*, xliii, 257-262 (1914).  
— Regulation vs. profit-sharing. *Aera*, ii, 789-800 (1914).

ESHLEMAN, J. M. What regulation must accomplish if it is to be permanent. *Annals of the American Academy of Political and Social Science*, lvii, 94-110 (1915).  
Excellent.

EWING, M. C. Recall of commissioners illogical. *Public Service*, xvi, 47-48 (1914).

FLOY, HENRY. The engineer's activity in public affairs: public utility commissions and franchise valuation. *Trans., American Institute of Electrical Engineers*, xxvii, 335-353 (1908). Discussion: pp. 354-372. A general commentary on commission regulation and franchise value.

FOOTE, A. R. Non-taxation of service companies. *Public Service*, iii, 109-112 (1907).

FOSTER, H. A. Control of public utilities. (*In* Engineering valuation of public utilities and factories. New York, 1912.) 259-263.

FRIEDMAN, H. J. A word about commissions. *Harvard Law Review*, xxv, 704-716 (1912).

An excellent discussion of whether commissions are legislative or judicial and of the importance of the decision; with citations.

GUERNSEY, N. T. The regulation of municipal utilities. *Annals of the American Academy of Political and Social Science*, lvii, 20-27 (1915).

Defense of the companies, comments on the requirements for successful regulation and argument for non-interference by commissions.

— Utility regulation. *Public Service*, xvii, 175-178 (1914).  
Abstract.

HAYES, H. V. The public's financial interest in public utilities. *North American Review*, cxcviii, 341-351 (1913).

HOLMES, F. L. Regulation of railroads and public utilities in Wisconsin. New York, 1915. 375 pp.

Discusses the work of the Wisconsin commission only, but serves as a very good general work on all phases of public utility regulation; rather elementary.

For list of chapters, see p. 104.

HUMPHREYS, A. C. The engineer's part in regulation of public utilities. *Public Service*, xvi, 55-56 (1914).

On the desirability of engineers as commissioners.

— Qualifications of a public service commissioner. *Electric Railway Journal*, xliv, 689-691 (1914).

A good, popular discussion.

HUMPHREYS, A. C. Reform and regulation. *Journal of the Boston Society of Civil Engineers*, iii, 271-294 (1916).

INSULL, SAMUEL. Some comments on public utility commissions. *Electric Railway Journal*, xlvii, 950-951 (1916).

JACKSON, H. D. The public versus the public service corporation. *Engineering Magazine*, xl ix, 402-409 (1915).

JOHNSON, E. R. The principles of governmental regulation of railways. *Political Science Quarterly*, xv, 37-49 (1900).  
A good, somewhat theoretical article on the requirements for success in railroad regulation. Of some interest for other public utilities.

KERR, W. D. Qualifications needed for public utilities commissioners. *Annals of the American Academy of Political and Social Science*, liii, 19-35 (1914).  
An excellent annotated classification of the requirements of the commission laws of all states, with discussion.

KING, C. L. The need for public utility commissions. (*In The regulation of municipal utilities*. New York, 1912.) 185-207.  
A good elementary discussion of the various possible methods of public utility regulation, the conclusion being in favor of commissions.

KNOWLES, MORRIS. State regulation of public utilities. *Public Service*, xiii, 253-255 (1912).  
Good; elementary.

LAWTON, W. H. Depreciation, intangible values and rates. *Journal of Accountancy*, xvii, 325-354 (1914).  
An excellent article including a discussion of the dangers in commission control.

LEE, G. A. The regulation of public service utilities. *Public Service*, xv, 124-126 (1913).

LOVELAND, H. D. How commissions regard utilities. *Journal of Electricity, Power and Gas*, xxxiii, 11-13 (1914).

MCCULLOCH, RICHARD. The present tendency of public service regulation. *Proc., American Electric Railway Association*, 1913: 320-335.  
A good summary of the usual requirements of the commission acts on various points. Includes a large tabular analysis of the laws by states.

McCULLOCH, RICHARD. The present tendency of public service regulation. *Electric Railway Journal*, xlii, 858-860 (1913). Abstract.

McREYNOLDS, T. C. State supervision of public utilities. *Public Service*, ix, 105-108 (1910). Argument in favor of a public service commission for Indiana.

MALTBIE, M. R. Public service commissions. (*In McLAUGHLIN, A. C., and HART, A. B. Cyclopedias of American government. New York, 1914.*) iii, 108-110.

METCALF, LEONARD. Public utility commissions should regulate, not operate, corporations. *Engineering Record*, lxxiv, 588-590 (1916).

MEYER, B. H. Advantages of a state public utilities commission. *Proc., Minnesota Academy of Social Science*, vi, 58-64 (1912). Discussion: pp. 78-87.

MYERS, G. L. Personnel of public service commissions. *Journal of Electricity, Power and Gas*, xxxi, 176-177 (1913). A good criticism of methods of selection, with suggested remedies.

— — — *Public Service*, xvi, 15-16, 26 (1914).

National Civic Federation. Draft bill for the regulation of public utilities: with documents relating thereto. New York? 1914. 124 pp. Contains the text of the suggested bill, together with arguments for and against proposed amendments and a table showing the number of members, terms and salaries of the various commissions.

NORTON, W. J. State regulation. *Electrical Review and Western Electrician*, lxvi, 632-633 (1915). An interesting discussion of various commissions, the writer asserting that their ill success has been due to poor appointments and politics.

— — — The two epochs of rate regulation. *Engineering and Contracting*, xl, 282-284 (1913). The writer believes there should be a preparatory and final period of regulation, and discusses the situation confronting new public service commissions.

— — — *Public Service*, xv, 87-89 (1913).

NUTTING, H. G. D. Is regulation failing? *Electrical Review and Western Electrician*, 811-812 (1914).

POLLOCK, H. M. The public service commissions of the state of New York. *Annals of the American Academy of Political and Social Science*, xxxi, 115-124 (1908).  
Discusses briefly the danger of political appointments.

PROUTY, C. A. Court protection unsafe. *Public Service Regulation*, i, 246-249 (1912).  
The writer asserts that the legislature must dominate since the courts do not inspire confidence.

ROEMER, J. H. Certain important provisions of the public utilities law of Wisconsin, and the results of their operation. *Kansas City?* 1911? 20 pp.  
A general, elementary commentary on commission regulation.

ROWE, L. S. The possibilities and limitations of municipal control. *Annals of the American Academy of Political and Social Science*, 1900: supplement, 9-20.  
Shows that pecuniary return to the city should be subordinated to quality and cost of service; and that state regulation is becoming increasingly necessary.

VAIL, T. N. Public utilities and public policy. *Atlantic Monthly*, cxi, 307-319 (1913).  
— State control of public utility companies. *Public Service*, xi, 9-11, 26 (1911).  
— Wages subject for regulation. *Aera*, iv, 996-1000 (1916).

WHITNEY, T. H. Coöperation and harmony between companies, commissions and public. *Electric Railway Journal*, xliv, 718-719 (1914).  
Popular.

WILCOX, D. F. The crisis in public service regulation in New York. *National Municipal Review*, iv, 547-563 (1915).  
A very popular historical account of the appointments to the first district commission. Interesting because of showing the effect of politics on the efficiency and success of commissions.

— Effects of state regulation upon the municipal ownership movement. *Annals of the American Academy of Political and Social Science*, liii, 71-84 (1914).

An excellent discussion of some of the problems and results of commission regulation in the various states, the attitude of the companies, public and courts towards the commissions and the effects on municipal ownership.

**WILCOX, D. F.** Supervision of local utilities by state commissions. (*In Municipal franchises*. New York, 1911.) ii, 732-745.  
Good; elementary.

**WOOD, A. E.** The labor problem of municipal utilities. *Utilities Magazine*, i, no. 7, 17-30 (1916).  
Advocates placing wage adjustment in the hands of the commissions.

## HISTORY

### COMMISSIONS IN GENERAL

**BEMIS, E. W.** Some present day issues of public utility regulation. *Annals of the American Academy of Political and Social Science*, lvii, 62-71 (1915).

Brief popular discussion of commission regulation, from the public's point of view.

**BOWMAN, H. M.** State railroad commissions. (*In McLAUGHLIN, A. C., and HART, A. B. Encyclopedia of American government*. New York, 1914.) iii, 134-135.

Includes tables — by states — of the date of organization of the first commission, and of jurisdiction.

**CLARK, F. C.** State railroad commissions and how they may be made effective. *Publications, American Economic Association*, vi, 473-582 (1891).

History with discussion. Includes tables of the organization, powers and duties of the commissions.

**DICKERMAN, J. C.** Standards for gas service: established by public service commissions. *Utilities Magazine*, i, no. 6, 16-21 (1916).

Supplementary to U. S. Bureau of standards, "Standards for gas service" (circular no. 32, 3d edition). Codification of the rules of all commissions.

**DIXON, F. H.** Recent railroad commission legislation. *Political Science Quarterly*, xx, 612-624 (1905).

DOHERTY, H. L. State regulation of lighting enterprises. *American Gas Light Journal*, lxxxix, 92-98 (1908).  
A general historical discussion of the origins and development of the commission movement.

DUNN, S. O. The state railway commissions. *Railroad Age Gazette*, xlvi, 123-125 (1909).  
A tabular analysis of the personnel of the various railroad commissions (previous experience, salary, terms, etc.), with discussion.

FERGUSON, MAXWELL. State regulation of railroads in the south. *Columbia University Studies in History, Economics and Public Law*, lxvii, 1-228 (1916).  
Includes general discussion, history, and powers of the commissions in the various states, treated separately, and a general summary of the present commission situation.

FLOY, HENRY. Public service commissions. (*In Valuation of public utility properties*. New York, 1912.) 32-48.  
A brief sketch of commission history and results.

GRAY, J. H. Public service commissions. *Proc., American Political Science Association*, iv, 324-335 (1907).  
A discussion of papers by W. H. Hatton and T. M. Osborne.  
Briefly considers the regulation in certain states.

GRUHL, EDWIN. Policies of regulating bodies. *Aera*, iii, 24-33, 113-123 (1914).  
A very interesting study.

HAGENAH, W. J. The development of the true function of the commission. *Electrical World*, lxvii, 16-17 (1916).  
Review of commission regulation in 1915.

HEILMAN, R. E. Commission control of refunding utility securities. *Utilities Magazine*, i, no. 4, 26-30 (1916).  
Contains many citations of court and commission decisions.

— The development by commissions of the principles of public utility capitalization. *Journal of Political Economy*, xxiii, 888-909 (1915).  
An excellent annotated study, with a brief discussion of the attitude of the various commissions on important capitalization problems.

HEILMAN, R. E. Development by commissions of the principles of public utility valuation. *Quarterly Journal of Economics*, xxviii, 269-291 (1914).

An excellent annotated study, with a brief discussion of the attitude of the various commissions on certain important valuation problems.

HILLS, A. S. The origin, growth, and work of public utility commissions. *Public Service*, xii, 58-61 (1912).

HODGKINS, H. C. Franchises of public utilities as they were and as they are. *Journal of the American Waterworks Association*, ii, 739-758 (1915).

A very interesting study, giving a brief review of franchise history, tables of the terms of franchises in each state and of the kinds of utilities coming under the jurisdiction of the various commissions; with discussion.

HUEBNER, G. G. Five years of railroad regulation by the states. *Annals of the American Academy of Political and Social Science*, xxxii, 138-156 (1908).

An excellent tabulation of the commission laws, 1902-1907. Supplementary to U. S., Interstate commerce commission, "Railways in the United States in 1902" (part IV).

HUGGINS, W. L. State regulation of public utilities. *Public Service*, xiv, 175-176 (1913).

States that commission regulation is "only a return to common law methods."

HUMPHREYS, C. J. R. The development of the public utilities commissions as applied to the gas and electric business. *American Gas Light Journal*, xci, 223-233 (1909).

An historical account of the origin of the commission movement and an outline of the earlier commission laws in various states.

JOHNSON, E. R. Railway regulation by the states: the state commissions. (*In Elements of transportation*. New York, 1909.) 132-139.

An elementary historical account.

—, and VAN METRE, T. W. Regulation of railroads by the American state governments: the state commissions. (*In Principles of railway transportation*. New York, 1916.) 467-491.

JOHNSON, E. R. Regulation of railways by the American state governments: the state commissions. (*In American railway transportation.* 2d revised edition. New York, 1909.) 349-366.

KERR, W. D. Qualifications needed for public utilities commissioners. *Annals of the American Academy of Political and Social Science*, liii, 19-35 (1914).  
An excellent annotated classification of the requirements of the commission laws of all states, with discussion.

KING, C. L. Rules regulating water service adopted by state public service commissions. *Utilities Magazine*, i, no. 9, 19-23 (1916).  
Codification of the rules of all commissions.

KLUMPP, J. B. Summary of commission regulations governing gas supply. *American Gas Light Journal*, ciii, 75 (1915).  
An excellent tabular summary.

LEE, E. B. The public utility movement: public service commissions. *Moody's Magazine*, xiii, 465-469 (1912).

MCCULLOCH, RICHARD. The present tendency of public service regulation. *Proc., American Electric Railway Association*, 1913: 320-335.  
A good summary of the usual requirements of the commission acts on various points. Includes a large tabular analysis of the laws by states.  
— — — *Electric Railway Journal*, xlvi, 858-860 (1913).  
Abstract.  
— — — Tendency of utility regulation. *Public Service*, xv, 159-161 (1913).  
Abstract.

MCLEAN, S. J. State regulation of railways in the United States. *Economic Journal*, x, 349-369 (1900).  
A thoroughly annotated historical study.

MALTBIE, M. R. Public service commissions. (*In McLAUGHLIN, A. C., and HART, A. B. Cyclopedias of American government.* New York, 1914.) iii, 108-110.

NASH, L. R. Development of commission regulation. Stone and Webster Public Service Journal, xv, 18-27 (1914). A tabular analysis, chart and discussion of the authority and jurisdiction of the various state commissions.

National Civic Federation. Commission regulation of public utilities: a compilation and analysis of laws of forty-three states and of the federal government for the regulation by central commissions of railroads and other public utilities. New York, 1913. 1284 pp.

— Draft bill for the regulation of public utilities: with documents relating thereto. New York ? 1914. 124 pp. Includes a table showing the number of commissioners, their terms, salaries and manner of selection, for the various state commissions (pp. 111-114).

NORTON, W. J. Approval of demand rates by public service commissions. Electrical Review and Western Electrician, lxv, 960-961 (1914).

— Effects of the indeterminate franchise under state regulation. Annals of the American Academy of Political and Social Science, liii, 135-147 (1914). A good, annotated account of the law and experience of various states.

— State regulation. Electrical Review and Western Electrician, lxvi, 632-633 (1915). An interesting discussion of various commissions, the writer asserting that their ill success has been due to poor appointments and politics.

NUTTING, H. G. D. Is regulation failing? Electrical Review and Western Electrician, lxv, 811-812 (1914).

PIKE, C. W. Service standards for electric light and power companies as prescribed by public service commissions. Utilities Magazine, i, no. 5, 21-28 (1916). See revised codification.

— — Utilities Magazine, i, no. 7, 30-40 (1916). Revised codification of the rules of all commissions.

SCOBELL, E. C. Variations in public service systems of accounting. Proc., National Electric Light Association, 1914: accounting session, 188-193.

**SHARFMAN, I. L.** Commission regulation of public utilities: a survey of legislation. *Annals of the American Academy of Political and Social Science*, liii, 1-18 (1914).

An excellent account of the provisions of the commission laws of all states, thoroughly annotated.

— Regulation by the states. (*In Railway regulation*. Chicago, 1915.) 139-171.

Reprint of "Commission regulation of public utilities: a survey of legislation."

**THELEN, MAX.** Report on leading railroad and public service commissions. Sacramento, 1912. 98 pp.

An excellent report on the organization and work of the public service commissions of Oregon, Washington, Nebraska, Minnesota, Wisconsin, New York, Massachusetts, Maryland, Georgia, Texas and Oklahoma.

**TINGLEY, C. L. S.** Present tendency of public utility laws and regulations. *Proc., American Electric Railway Association*, i, 301-320 (1913).

A rather general discussion of commission developments and especially of the new Illinois commission law; with quotations from court decisions.

**U. S. Interstate Commerce Commission.** Railways in the United States in 1902. Washington, 1903. 5 vols.

Pt. IV: State regulation of railways. 416 pp.

Appendix to sixteenth annual report. An excellent tabulation of the commission laws and their changes since 1890. For a supplementary compilation, see G. G. Huebner, "Five years of railroad regulation by the states."

**WILCOX, D. F.** Effects of state regulation upon the municipal ownership movement. *Annals of the American Academy of Political and Social Science*, liii, 71-84 (1914).

An excellent discussion of some of the problems and results of commission regulation in the various states.

#### CALIFORNIA

**EASTWOOD, J. S.** The railroad commission and the public. *Journal of Electricity, Power and Gas*, xxxii, 51-54 (1914).

Discussion of state *vs.* local regulation in California. Favors state control.

ESCH, FRED. Utility law variations. *Public Service Regulation*, i, 492-494 (1912).

A comparison of the California and Wisconsin acts.

ESHLEMAN, J. M. State and municipal control of utilities. *Public Service Regulation*, i, 587-593 (1912).

Abstract.

— State *vs.* municipal regulations of public utilities. *National Municipal Review*, ii, 11-23 (1913).

On the combination of state and local regulation in California, favoring state control.

SINSHEIMER, P. A. Ten rules for service: principles applied by the railroad commission of California to the regulation of public utility service. *Annals of the American Academy of Political and Social Science*, liii, 292-306 (1914).

THELEN, MAX. A California problem. *Public Service Regulation*, i, 662-663 (1912).

Discusses question of whether California municipalities should delegate to the state commission their powers over public utilities.

— California's new law. *Public Service Regulation*, i, 260-262 (1912).

Analysis of the act of 1912.

— Public utility regulation in California. *Proc., National Electric Light Association, 1915: general session*, 263-270.

Brief historical sketch of electric utilities and regulation in California.

### *Los Angeles*

MOHLER, C. K. Public utility regulation by Los Angeles. *Annals of the American Academy of Political and Social Science*, liii, 108-118 (1914).

A discussion of the powers and work of the commission.

WORKS, L. R. The board of public utilities of Los Angeles. (*In KING, C. L. The regulation of municipal utilities. New York, 1912.*) 208-218.

A brief, popular account of the commission and its work.

## COLORADO

STALEY, D. H. Colorado in litigation. *Public Service Regulation*, i, 36-37 (1912).

Brief historical sketch of the Railroad commission and legislation.

## ILLINOIS

BENNETT, C. G. Illinois utilities commission and the water-works companies. *Journal of the American Waterworks Association*, ii, 382-389 (1915).

A brief historical sketch and discussion.

FAIRLIE, J. A. Public utility legislation in Illinois. *National Municipal Review*, iii, 28-33 (1914).

Historical sketch of the legislation leading up to the enactment of the commission law.

FEUSTEL, R. M. Some aspects of the work of the Illinois utilities commission. *Journal of the Western Society of Engineers*, xix, 965-974 (1914).

Discussion: pp. 974-978. Considers chiefly the organization and work of the engineering department.

FRENCH, H. J. Laying foundation for new commission. *Public Service*, xi, 205-207 (1911).

An Illinois committee makes an eighteen-month investigation tour before preparing the commission law.

NORTON, W. J. Illinois public utility commission law and municipal ownership law: with annotations, marginal notes and index digest. Chicago, 1913. 200 pp.

ROBINSON, M. H. The public utilities commission. (*In* A report on supervision of corporations and related business. Chicago, 1914.) 39-48.

Report prepared for Efficiency and economy committee, Illinois legislature.

A good historical sketch.

TINGLEY, C. L. S. Present tendency of public utility laws and regulations. *Proc., American Electric Railway Association*, i, 301-320 (1913).

A rather general discussion of commission developments and especially of the new Illinois commission law; with quotations from court decisions on regulation.

WHERRY, W. M., JR. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania and West Virginia. ?, 1913. 91 pp.

Each law analyzed separately by sections.

### *Chicago*

ARNOLD, B. J., FLEMING, H. B., and WESTON, GEORGE. Phases in the development of the street railways of Chicago. *Journal of the Western Society of Engineers*, xiv, 641-668 (1909).

An account of the formation and work of the Board of supervising engineers, by George Weston: pp. 653-668.

### INDIANA

DUNCAN, T. C. Purposes and methods of the Indiana utility act. Indianapolis, 1913. 17 pp.

Brief discussion of the act, by the chairman of the commission.

MCREYNOLDS, T. C. State supervision of public utilities. *Public Service*, ix, 105-108 (1910).

Argument in favor of a public service commission for Indiana.

WHERRY, W. M., JR. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania and West Virginia. ?, 1913. 91 pp.

Each law analyzed separately by sections.

### IOWA

DIXON, F. H. State railroad control: with a history of its development in Iowa. New York, 1896? 250 pp.

An excellent study of the history of railroad legislation and commission regulation in Iowa; of interest for all public utilities.

DOWNEY, E. H. Regulation of urban utilities in Iowa. Iowa City, 1912. 174 pp.

Iowa applied history series, i, no. 3.

Public service commissions in the United States, pp. 58-100.

An excellent, thoroughly annotated study of public service commission laws, with tables showing the powers and organization of the various commissions.

## MASSACHUSETTS

ADAMS, A. D. The New York and Massachusetts commissions of gas and electricity. *Electrical World and Engineer*, xlvi, 97-98 (1905).

— Regulation of electric rates in Massachusetts. *Electrical World and Engineer*, xlvi, 391-392, 442-443, 484-486 (1905). Gives the facts and rulings in various cases before the commission, without discussion.

— Regulation of gas and electric rates in Massachusetts. *Electrical World and Engineer*, xlvi, 310-311, 348-349 (1905). Gives the facts and rulings in various gas rate cases before the commission, without discussion.

EASTMAN, J. B. The public service commission of Massachusetts. *Quarterly Journal of Economics*, xxvii, 699-707 (1913). An historical discussion, with an account of the powers of the new commission.

— The public utilities commissions of Massachusetts. *Proc., National Conference for Good City Government*, 1908: 288-307. A discussion of the commissions and their work.

— — — (*In* KING, C. L. *The regulation of municipal utilities*. New York, 1912.) 276-295. Revised reprint.

GRAY, J. H. Competition and capitalization as controlled by the Massachusetts gas commission. *Quarterly Journal of Economics*, xv, 254-276 (1901).

— The gas commission of Massachusetts. *Quarterly Journal of Economics*, xiv, 509-536 (1900). Historical study.

SCOVELL, C. H. A report on the policies and administrative work of the commissions regulating public service companies in Massachusetts. Boston, 1911. 45 pp. Report to the governor of Massachusetts. Chiefly of historical interest. The writer recommends a single public utility commission to secure uniformity and more expert service.

WARREN, B. W. The state and the street railway: one successful solution of the problem of their mutual relations. Green Bag, xvii, 33-42 (1905).

An historical and descriptive account of the Massachusetts system of traction regulation.

#### MINNESOTA

JONES, S. P. The advisability of a state public utilities commission for Minnesota. Proc., Minnesota Academy of Social Science, vi, 65-77 (1912).

The writer favors local commissions for the large cities and a state commission having jurisdiction only over rural communities.

#### MISSOURI

##### Kansas City

HARZFIELD, J. A. The utilities commission of Kansas City, Missouri. (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 219-230.

A brief, popular account of the commission and its work.

##### St. Louis

BALDWIN, R. N. The St. Louis public service commission. (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 231-249.

A popular account of the commission and its work.

#### NEW JERSEY

DANIELS, W. M. "Law that has teeth." Public Service Regulation, i, 31-32 (1912).

An outline of the provisions of the public utility act.

#### NEW YORK

ADAMS, A. D. The New York and Massachusetts commissions of gas and electricity. Electrical World and Engineer, xlvi, 97-98 (1905).

ANDERSON, WILLIAM. The work of public service commissions, with special reference to the New York commissions. Minneapolis, 1913. 44 pp.

University of Minnesota, Current problems series, no. 1. Elementary.

BRUÈRE, HENRY. Public utilities regulation in New York. *Annals of the American Academy of Political and Social Science*, xxxi, 1-17 (1908).

EDWARDS, H. M. Regulated electric light accounting. *Proc., National Electric Light Association*, 1912: vol. ii, 106-137. Discussion: pp. 137-148. A critical analysis of the accounting system prescribed by the New York commission. Technical.

FOOTE, A. R. Regulation of public utilities: a comparison of the New York and Wisconsin public utility bills. Columbus, 1911. 36 pp. A detailed comparison of the various clauses; with a short bibliography.

GRANT, G. R. The New York public service commission for the second district. (*In KING, C. L. The regulation of municipal utilities*. New York, 1912.) 326-341. Elementary.

HOWLAND, H. J. A year of "government by commission." *Outlook*, xc, 483-490 (1908). A popular, but interesting account of the commissions' work, with answers to arguments of their opponents.

HUNTER, C. F. Commission's electrical testing outfit. *Public Service Regulation*, i, 333-335 (1912). Description of the testing equipment of the New York public service commission for the second district, illustrated with photographs.

IVINS, W. M., and MASON, H. D. The control of public utilities: in the form of an annotation of the public service commissions law of the state of New York, and covering all important American cases, together with the text of the federal interstate commerce act and the rapid transit act of New York, with elaborate indexes of the same and numerous comparative notes and cross references to parallel provisions in the several acts. New York, 1908. 1149 pp. A very thorough legal work.

KENNEDY, J. S. The New York public service commissions. *Forum*, xlviii, 584-595 (1912).

LAPP, J. A. Public utilities control. *American Political Science Review*, i, 626-638 (1907). Analysis and comparison of the New York and Wisconsin commission laws.

LEONARD, C. F. Gas service regulation in New York. *Public Service Regulation*, i, 455-458 (1912).  
Description of the testing equipment and methods of the New York public service commission for the second district, illustrated with photographs.

MCCLELLAN, WILLIAM. Diverted efforts of commissions. *American Gas Light Journal*, civ, 118-119 (1916).  
The writer asserts that failure of the New York commissions to properly regulate rates and service has been due to their having too many other duties.

MALTBIE, M. R. The fruits of public regulation in New York. *Annals of the American Academy of Political and Social Science*, xxxvii, 170-190 (1911).  
On the work of the commission, and the service and other improvements resulting.

MEAD, E. S. The public service commission and the investor. *Lippincott's Monthly Magazine*, xc, 764-768 (1912).  
A popular discussion of the control of capitalization by the New York commissions.

OSBORNE, T. M. The New York public service commissions. *Proc., National Conference for Good City Government*, 1908: 269-287.  
A discussion of the provisions of the law.

— The public service commissions law of New York state. *Proc., American Political Science Association*, iv, 287-304 (1907).  
Discussion: pp. 324-335. An analysis and discussion of the act.

— — — *Atlantic Monthly*, ci, 544-554 (1908).

— The public utility law of New York. (*In KING, C. L. The regulation of municipal utilities*. New York, 1912.) 318-326.  
Revised and reprinted from *Proc., National Conference for Good City Government*.

POLLOCK, H. M. The public service commissions of the state of New York. *Annals of the American Academy of Political and Social Science*, xxxi, 115-124 (1908).

STOWE, L. B. The public service companies and the people. *Outlook*, xcv, 515-521 (1910).

WHITNEY, T. H. The New York City public service commission. Proc., American Political Science Association, v, 96-110 (1908).

An excellent account of the provisions of the act.

— New York public utilities. Public Service Regulation, i, 127-128 (1912).

— The public service commissions act of New York. Green Bag, xix, 412-424 (1907).

A detailed analysis of the act.

WHITTEN, R. H. The work of the public service commission for the first district, New York. (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 341-377.

Elementary.

WILCOX, D. F. The crisis in public service regulation in New York. National Municipal Review, iv, 547-563 (1915).

A very popular historical account of the appointments to the first district commission. Interesting because of showing the effect of politics on the efficiency and success of commissions.

— Needed changes in the public service laws of New York. Utilities Magazine, i, no. 2, 14-16 (1915).

An excellent brief discussion of the division of functions between state and local regulation.

— Public service commission situation in New York. National Municipal Review, v, 307-309 (1916).

A supplementary note to "The crisis in public service regulation in New York."

#### *New York*

MALTBIE, M. R. A rapid transit policy for greater New York. Proc., National Conference for Good City Government, 1909: 390-402.

An historical sketch, with discussion of the work of the rapid transit commission.

— — — (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 120-136.

Revised reprint.

## OHIO

GASKILL, D. L. Ohio's public utility law's weakness. *Public Service*, xi, 49-51 (1911).

A brief discussion of certain sections of the act.

RADCLIFFE, C. A. Public utility act of Ohio. *Public Service Regulation*, i, 35 (1912).

Very brief account of the current act replacing the railroad commission by a public service commission.

## OKLAHOMA

MCKAY, E. F. The Oklahoma commission. *Public Service Regulation*, i, 29-30 (1912).

On the organization, powers and work of the commission.

## PENNSYLVANIA

BOWN, C. E. Some defects in the present Pennsylvania statute on public utilities. *Annals of the American Academy of Political and Social Science*, liii, 45-54 (1914).

MUNSON, C. LAR. Pennsylvania public service law. *Yale Law Journal*, xxiii, 214-247 (1914).

A detailed analysis of the act.

— The public service company law of Pennsylvania (approved July 26, 1913): digested, topically arranged and indexed (with a copy of the act). *Williamsport*, 1913? 75 pp.

STRATTON, I. W. State and local regulation in Pennsylvania.

*Annals of the American Academy of Political and Social Science*, lvii, 175-185 (1915).

A criticism of the commission law, because of too much power, red tape and irresponsibility.

TENER, J. K. The need for a public utilities bill in Pennsylvania.

*National Municipal Review*, i, 401-403 (1912).

A popular article advocating a commission with greater powers of enforcement of its findings.

TRINKLE, W. N. The public service company law of Pennsylvania. *Annals of the American Academy of Political and Social Science*, liii, 36-44 (1914).

An analysis and criticism of the commission act.

WHERRY, W. M., JR. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania and West Virginia. ?, 1913.  
91 pp.

Each law analyzed separately by sections.

#### TEXAS

HANEY, L. H. Railway regulation in Texas. *Journal of Political Economy*, xix, 437-455 (1911).

A discussion of the railroad commission law; of some general interest.

#### VERMONT

MARSTON, GLENN. Vermont public utilities bill. *Public Service*, vi, 109-110 (1909).

A brief arraignment of the act.

#### VIRGINIA

BRAXTON, A. C. The Virginia state corporation commission. *American Law Review*, xxxviii, 481-499 (1904).

An historical sketch and analysis of the law; technical.

MAGRUDER, F. A. Recent administration in Virginia. *Johns Hopkins University Studies in History and Political Science*, xxx, 11-199 (1912).

Public service corporations: pp. 147-162.

A good historical study of the commissions and public service regulation.

#### WASHINGTON

SMITH, J. A. Municipal vs. state control of public utilities. *National Municipal Review*, iii, 34-43 (1914).

Arguments against exclusive state control, including brief discussion of the Washington law.

#### WEST VIRGINIA

WHERRY, W. M., JR. Four public utilities laws analyzed: Illinois, Indiana, Pennsylvania and West Virginia. ?, 1913.

91 pp.

Each law analyzed separately by sections.

## WISCONSIN

BRYAN, W. H. Going value as an element in the appraisal of public utility properties. *Journal of the Association of Engineering Societies*, xliii, 147-158 (1909).  
Discussion: pp. 286-288. A very interesting discussion of intangible values as considered by the Wisconsin commission, and by J. W. Alvord in his "Notes on going value and methods for its computation."

— — — *Journal of Electricity, Power and Gas*, xxiv, 31-35 (1910).  
Reprint.

CADBURY, J. N. Regulating the quality of public utility service. *Annals of the American Academy of Political and Social Science*, liii, 262-268 (1914).  
A brief description of the Wisconsin commission's practice.

— Standards for gas and electric service. *Public Service Regulation*, ii, 94-99 (1913).  
An outline of proposed changes in the service standards of the Wisconsin commission; with brief discussion.

COMMONS, J. R. The La Follette railroad law in Wisconsin. *American Monthly Review of Reviews*, xxxii, 76-79 (1905).

— The Wisconsin public utilities law. *American Review of Reviews*, xxxvi, 221-224 (1907).  
Brief popular discussion of the law and its provisions.

CRAVATH, J. R. Demand and diversity factors and their influence on rates. *Electrical World*, lvi, 567-570 (1910).  
A good discussion, with tables compiled by the Wisconsin commission; semi-technical.

CROWLEY, J. C. Control helps utilities. *Public Service Regulation*, i, 181 (1912).

DREHER, H. W. Effect of utility regulations upon the banks. *Public Service*, xv, 21-22 (1913).  
On the beneficial results of the Wisconsin public utility law.

ERICKSON, HALFORD. Methods of determining life of public utilities. *Engineering and Contracting*, xxxviii, 448-450 (1912).  
Abstract. Treats chiefly of methods of estimating life of equipment used by the Wisconsin commission.

ERICKSON, HALFORD. Methods of providing for and recording depreciation. *Engineering and Contracting*, xxxviii, 506-511 (1912).

Abstract. A technical discussion of the accountancy of depreciation of the Wisconsin commission; with tables. A continuation of the abstract entitled "Methods of determining life of public utilities."

— Rates and rate making under the Wisconsin public utility law. *Proc., American Waterworks Association*, xxxiii, 49-68 (1913).

Discussion: pp. 68-77. "My purpose here is to explain the work involved, the facts that are needed and the methods employed in making rates for waterworks under the public utility law in Wisconsin."

— The regulation of public utilities in Wisconsin. *Journal of the Western Society of Engineers*, xviii, 398-422 (1913).

Discussion: pp. 423-440. A good elementary description of the work of the commission.

— — — Public Service, xiv, 135-138, 179-181 (1913).

Abstract.

— Regulation of utilities by commission. *Railway Age Gazette*, liv, 755-759 (1913).

Abstract.

— Wisconsin method of depreciation accounting. *Gas Age*, xxiv, 113-117 (1914).

ESCH, FRED. Utility law variations. *Public Service Regulation*, i, 492-494 (1912).

A comparison of the California and Wisconsin acts.

FAIRCHILD, A. W. Review of recent legislation in Wisconsin affecting public utilities. *Electric Railway Journal*, xxxix, 145-146 (1912).

A brief description of the stock and bond law, and the indeterminate permit legislation.

FOOTE, A. R. Regulation of public utilities: a comparison of the New York and Wisconsin public utility bills. Columbus, 1911. 36 pp.

A detailed comparison of the various clauses; with a short bibliography.

GILMORE, E. A. The Wisconsin public utilities act. *Green Bag*, xix, 517-525 (1907).

A detailed analysis of the provisions of the act.

HOLMES, F. L. Regulation of railroads and public utilities in Wisconsin. New York, 1915. 375 pp.

A very good annotated summary of the work of the commission. For list of chapters, see p. 104.

— Regulation that regulates. *Independent*, lxviii, 905-910 (1910).

A popular account of the Wisconsin commission and its work; with portraits of the commissioners.

HUDNALL, G. H. Public service commission law of Wisconsin. *Proc., American Political Science Association*, iv, 316-323 (1907).

JOHNSON, R. V. *Workings* of Wisconsin commission. *Public Service*, xii, 129-132, 145-146 (1912).

Treats chiefly of the benefits resulting, and includes extracts from remarks of various utility managers.

KING, C. L. Minnesota home rule and Wisconsin regulation. *National Municipal Review*, iii, 564-572 (1914).

A reply to Minnesota home rule league's "Regulation of public utilities in Wisconsin."

A good discussion of the work of the Wisconsin commission, and results therefrom.

LAPP, J. A. Public utilities control. *American Political Science Review*, i, 626-638 (1907).

Analysis and comparison of the New York and Wisconsin commission laws.

LEWIS, H. T. Interest and profits in rate regulation: the practice of the Wisconsin railroad commission. *Political Science Quarterly*, xxvii, 239-259 (1912).

A good analysis, with many quotations from cases before the commission.

MATHEWS, G. C. Wisconsin water rates. *Public Service Regulation*, i, 33-35 (1912).

Discussion of the methods and procedure used.

MEYER, B. H. State supervision of electric railways in Wisconsin. *Annals of the American Academy of Political and Social Science*, xxxvii, 160-169 (1911).

Relates to service requirements in particular.

MEYER, B. H. What the Wisconsin utilities commission has done. Concerning Municipal Ownership, iii, 27-28 (1908). Abstract.

— The Wisconsin public utilities commission. (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 296-317. Reprinted from Proc., National Conference for Good City Government.

— The Wisconsin public utilities law. Proc., National Conference for Good City Government, 1908: 257-268. An account of the work of the commission and the resulting benefits; with one table.

— — — Electric Railway Journal, xxxiii, 103-104 (1909). Abstract.

MILLER, W. E. Ashland water rate decision explained. Engineering Record, lxxi, 805-807 (1915). On decisions of the Wisconsin commission refusing to accept 4 per cent as an adequate return, and revising rates.

Minnesota Home Rule League. Regulation of public utilities in Wisconsin: an analysis of the system and the results. Minneapolis, 1914. 46 pp. A brief arraignment of the commission; unconvincing. For a reply, see C. L. King, "Minnesota home rule and Wisconsin regulation."

PENCE, W. D. The functions of a technical staff in public utility regulation. Proc., Indiana Sanitary and Water Supply Association, 1913: 114-142. Describes the work of the Wisconsin commission's technical staff; includes an outline of the inventory used and of the form of organization.

— Functions of a technical staff in the regulation of public utilities. Engineering Record, lxvii, 260-262 (1913). Abstract.

— The valuation and inspection work of the joint engineering staff of the Wisconsin tax and railroad commissions. Engineering News, lxi, 227-229 (1909). Abstract.

PENCE, W. D. Valuation by Wisconsin state engineers. *Public Service Regulation*, ii, 127-130 (1913).  
Abstract.

— Wisconsin service inspection and improvement. *Public Service Regulation*, ii, 167-171 (1913).  
Abstract.

— The work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Journal of the Western Society of Engineers*, xiv, 73-100 (1909).  
Discussion: pp. 100-111. A full account of the organization and work of the engineering department.

— — — Engineering Record, lix, 10-12, 49-52, 73-75 (1909).  
Reprint.

ROEMER, J. H. The causes and effects of a public utility commission. *Public Service*, xi, 37-39, 85-88 (1911).  
Treats chiefly of the regulation of service by the Wisconsin commission.

— — — Madison, 1911. 25 pp.

— Certain important provisions of the public utilities law of Wisconsin, and the results of their operation. Kansas City? 1911? 20 pp.

— Methods of regulating public utilities. *Public Service*, xvii, 79-82 (1914).

— Some features of state regulation of public utilities. Madison, 1909. 25 pp.  
A very general and popular article on regulation and the work of the Wisconsin commission.

SALMON, C. B. Wisconsin public utility law: its operation and results. Proc., American Waterworks Association, xxix, 163-171 (1909).  
Discussion: pp. 171-183. An analysis of the law, by clauses.

— — — Municipal Engineering, xxxvii, 27-31 (1909).  
Reprint.

— The Wisconsin utility law: its benefits and restrictions. Proc., Central States Waterworks Association, 1912: 97-109.  
Discussion: pp. 109-112. A good elementary account of the commission's work, including a brief analysis of the act.

SIEFERT, C. A. Uniform classification. *Public Service Regulation*, i, 285-288 (1912).  
 A description of the water utility accounting under the Wisconsin commission.

STRAIT, E. N. Wisconsin commission method of rate making. *Gas Age*, xxxv, 263-268 (1915).  
 Describes the "mechanical procedure" by which gas and electric rates are derived. Includes illustrative tables and one chart.

WATKINS, G. P. Electrical rates in the opinions of the Wisconsin commission. *Quarterly Journal of Economics*, xxvii, 373-378 (1913).

#### STATE *vs.* LOCAL REGULATION

BOWN, C. E. Some defects in the present Pennsylvania statute on public utilities. *Annals of the American Academy of Political and Social Science*, liii, 45-54 (1914).  
 Asserts that municipalities should have more power, and the right to compete with private plants.

DAILEY, JOHN. State *vs.* city control. *Public Service Regulation*, i, 183-184 (1912).

DOWNEY, E. H. Regulation of urban utilities in Iowa. *Iowa City*, 1912. 174 pp.  
*Iowa applied history series*, i, no. 3.  
 The failure of local regulation: pp. 39-51.  
 The appropriate organ of state regulation: pp. 52-59.  
 An excellent argument for state regulation.

EASTWOOD, J. S. The railroad commission and the public. *Journal of Electricity, Power and Gas*, xxxii, 51-54 (1914).  
 The writer favors state control.

EBERHART, A. O. Why I believe in state regulation of public service utilities. *Public Service*, xv, 157-158 (1913).

ERICKSON, HALFORD. The advantages of state regulation. *Annals of the American Academy of Political and Social Science*, lvii, 123-162 (1915).  
 The writer favors state regulation as being more uniform and because the cities lack the necessary money and facilities.

ESHLEMAN, J. M. State and municipal control of utilities. *Public Service Regulation*, i, 587-593 (1912).  
Abstract.

— State *vs.* municipal regulations of public utilities. *National Municipal Review*, ii, 11-23 (1913).  
On the combination of state and local regulation in California, favoring state control.

— What regulation must accomplish if it is to be permanent. *Annals of the American Academy of Political and Social Science*, lvii, 94-110 (1915).  
Excellent general discussion.

HAGENAH, W. J. State control versus municipal. *Public Service*, xiv, 21-22 (1913).  
A good popular argument for state commissions.

HARRISON, C. H. The regulation of public utilities. *Annals of the American Academy of Political and Social Science*, lvii, 54-61 (1915).  
Elementary discussion, including the advantages of local regulation.

HATTON, W. H. Public service commissions. *Publications, American Economic Association*, 3d series, ix, 263-278 (1908).  
Discussion: pp. 279-309. Refers briefly to the distribution of functions between state and local regulation.

— Proc., *American Political Science Association*, iv, 305-315 (1907).  
Discussion: pp. 324-335.

HOLMES, F. L. State *vs.* local control. (*In Regulation of railroads and public utilities in Wisconsin*. New York, 1915.) 289-311.  
On the experience of the Wisconsin commission, with general discussion; the author favoring state control.

JACKSON, H. D. The public *vs.* the public service corporation. *Engineering Magazine*, xl ix, 402-409 (1915).  
The writer advocates a combination of state and local control.

JONES, S. P. The advisability of a state public utilities commission for Minnesota. *Proc., Minnesota Academy of Social Science*, vi, 65-77 (1912).  
The writer favors local commissions for the large cities and a state commission having jurisdiction only over rural communities.

JONES, S. P. *State vs. local regulation.* *Annals of the American Academy of Political and Social Science*, liii, 94-107 (1914). Summarizes arguments against state regulation, and briefly refers to the experience in various places.

— *What certain cities have accomplished without state regulation.* *Annals of the American Academy of Political and Social Science*, lvii, 72-82 (1915). Argument for local regulation, with brief accounts of the experience in various cities.

KING, C. L. *State vs. municipal utility commissions.* (*In The regulation of municipal utilities.* New York, 1912.) 253-263. A good elementary discussion, the conclusion being that state commissions are necessary, but that the largest cities should have local commissions coöperating with them.

MCCULLOCH, RICHARD. *Local vs. state regulation.* *Electric Railway Journal*, xliv, 694-696 (1914). Gives a list of arguments against state regulation, and answers each in turn.

MALTBIE, M. R. *The distribution of functions between local and state regulation.* *Annals of the American Academy of Political and Social Science*, lvii, 163-169 (1915).

— *Public service commissions.* (*In McLAUGHLIN, A. C., and HART, A. B. Cyclopedie of American government.* New York, 1914.) iii, 108-110. Gives examples of state and local commissions, with very little discussion.

MERRIAM, C. E. *The case for home rule.* *Annals of the American Academy of Political and Social Science*, lvii, 170-174 (1915).

MEYER, B. H. *Advantages of a state public utilities commission.* *Proc., Minnesota Academy of Social Science*, vi, 58-64 (1912). Discussion: pp. 78-87.

— *Central utilities commissions and home rule.* *American Political Science Review*, v, 374-393 (1911). A good popular discussion.

POTTER, ALEXANDER. Obligation of the state to the municipality in matters of public works. Proc., American Society of Municipal Improvements, 1915: 343-349.

The writer believes that the state commissions should have only advisory powers over the affairs of cities.

ROEMER, J. H. Municipal regulation of public utilities. Proc., National Electric Light Association, 1915: general session, 271-283.

The writer believes that all except purely local matters can best be handled by a state commission.

— Utility home rule. Public Service, xix, 13-16 (1915).  
Abstract.

SMITH, J. A. Effect of state regulation of public utilities upon municipal home rule. Annals of the American Academy of Political and Social Science, liii, 85-93 (1914).

Strongly advocates local regulation because of its beneficial effect upon city government, and because of the irresponsibility of state commissions.

— Municipal *vs.* state control of public utilities. National Municipal Review, iii, 34-43 (1914).

Arguments against exclusive state control of municipal utilities, including brief discussion of the Washington law.

STRATTON, I. W. State and local regulation in Pennsylvania. Annals of the American Academy of Political and Social Science, lvii, 175-185 (1915).

A criticism of the commission law.

THELEN, MAX. A California problem. Public Service Regulation, i, 662-663 (1912).

Discusses question of whether California municipalities should delegate to the state commission their powers over public utilities.

WILCOX, D. F. Local utility departments, franchise bureaus and special experts. (*In* Municipal franchises. New York, 1911.) ii, 746-763.

A brief account of the local boards in various cities, with some discussion.

— Municipal home rule and public utility franchises. National Municipal Review, iii, 13-27 (1914).

Report of a committee of the National municipal league.

An excellent discussion of the division of functions between state and local commissions.

WILCOX, D. F. Needed changes in the public service laws of New York. *Utilities Magazine*, i, no. 2, 14-16 (1915). An excellent brief discussion of the division of functions between state and local regulation.

WORKS, L. R. State *vs.* municipal regulation of public utilities. *National Municipal Review*, ii, 24-30 (1913). Discusses chiefly the division of functions between state and local regulation.

### UNIFORM ACCOUNTING

ALLISON, LER. W. Accounting system for electric companies. *Power*, xxxviii, 697-700 (1913). Outlines of an accounting system based on that prescribed by the New Jersey commission, with tables of accounts and explanation. Of interest to accountants only.

— A complete accounting system for both large and small waterworks properties. *Engineering and Contracting*, xli, 77-80 (1914). Gives an extended outline of the accounts.

American Gas Institute. Report of committee on a uniform system of accounts for gas companies, September, 1914. Philadelphia ? 1914. 128 pp. Gives the schedules and classifications of accounts without discussion.

American Waterworks Association. A discussion of depreciation and a comparison of rates and bookkeeping methods of municipally and privately owned waterworks. Proc., American Waterworks Association, xxxiii, 325-327 (1912). Brief comments by many different men.

BAUER, JOHN. The idea of capitalization as applied to public service corporations. *Journal of Accountancy*, xxii, 1-9 (1916). Of accounting interest only.

— Rents in public utility accounting. *Journal of Accountancy*, xx, 21-27 (1915).

BRITTON, J. A. Accounting under utility regulation. *Journal of Electricity, Power and Gas*, xxx, 330-332, 357-359, 383-385 (1913). A detailed, elementary analysis of the different accounts, with diagrams.

BROCKWAY, W. B. Electric railway accounting: the monthly report, the accounting department and the accountant. New York, 1906. 84 pp.  
An elementary work.

CAHOON, J. B. Uniform accounting. Proc., National Electric Light Association, 1900: 180-229.

Classifications of accounts with suggested forms and some discussion; technical.

CHARLES, S. A. Meter locations and meter accounts. Proc., American Waterworks Association, xxiii, 556-564 (1903).  
Discussion: pp. 565-581. Includes an outline of meter accounts with suggested forms.

CHASE, H. S. Maintenance and depreciation charges in accounts of public service corporations. Journal of Accountancy, iv, 1-9 (1907).

On the need for proper and uniform accounts as the basis for comparisons of municipal and private ownership.

— Standard and uniform reports from public utilities both municipally and privately operated. Proc., National Conference for Good City Government, 1906: 227-243.

The writer advocates uniform reports from municipal and private plants all over the country. He suggests the Bureau of the census as the center of the movement.

Comparative statistics from ten Massachusetts companies, based on the proposed standard schedule, are appended.

— Standard and uniform reports. Municipal Journal and Engineer, xxi, 566-570 (1906).

Reprint.

COLDWELL, O. B. Analytical accounting for central station companies. Proc., National Electric Light Association, 1915: accounting session, 111-122.

Discussion: pp. 122-127. General, with illustrative forms.

DAVIES, H. J. Some accounting features of the Cleveland railway company's franchise. Proc., American Street and Interurban Railway Accountants' Association, 1910: 125-150.

Discussion: pp. 150-154. Of accounting interest only; includes many tables.

EDWARDS, H. M. Electric light accounts and their significance. New York, 1914. 172 pp. A detailed analysis of the accounts; technical.

— Regulated electric light accounting. Proc., National Electric Light Association, 1912: vol. ii, 106-137. Discussion: pp. 137-148. A critical analysis of the accounting system prescribed by the New York commission. Technical.

ELKINS, A. F. Public service accounting. *Aera*, ii, 1226-1231 (1914).

EMERY, J. A. Statistical units used in analysis of electric railway accounts. Proc., American Electric Railway Accountants' Association, 1913: 152-161. Discussion: pp. 161-166.

— Proc., American Electric Railway Transportation and Traffic Association, 1913: 403-412. Discussion: pp. 413-417. The same as above.

ERICKSON, HALFORD. Importance of uniform accounts and statistics. *American Gas Light Journal*, xcix, 54-55, 58-59 (1913). A good, elementary article.

FOLWELL, A. P. Standard forms for municipal utilities. Proc., American Society of Municipal Improvements, 1912: 54-67. Discussion: pp. 67-69. The results of an inquiry as to the reasons a standard accounting system was not generally used by waterworks throughout the country.

FORSE, W. H., JR. Electric railway auditing and accounting. New York, 1908. 157 pp. An accounting textbook.

— Improving accounting methods. *Aera*, ii, 707-713 (1914). On the proposed changes in the Interstate commerce commission classification.

— Interline accounting of interurban railways. Proc., American Street and Interurban Railway Accountants' Association, 1908: 75-92. Discussion: pp. 92-107. Of accounting interest only; with sample forms.

FOSTER, H. A. Central station bookkeeping and suggested forms: with an appendix for street railways. New York, 1894. 139 pp.

FULLER, C. H. Estimating cost of track construction on a unit time basis. *Electric Railway Journal*, xlvii, 80-84 (1916). Includes suggested forms and illustrative examples.

GAULT, E. D. Accounting system for a small electric railway. Proc., American Electric Railway Accountants' Association, 1911: 30-49. Discussion: pp. 49-68. A description of the various books and accounts.

GEORGE, H. H. Estimating the cost. *Electric Railway Journal*, xliv, 68-71 (1914).

On correct accounting for replacements and improvements; with illustrative forms.

GRUHL, EDWIN. Uniform accounting: its needs and results. (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 264-275. A good elementary account.

HATFIELD, H. R. Some neglected phases of accounting. *Electric Railway Journal*, xlvi, 799-802 (1915).

HOLMES, F. L. Uniform accounting. (*In* Regulation of railroads and public utilities in Wisconsin. New York, 1915.) 69-78. A good elementary discussion of the need for uniform accounting, and of the experience of the Wisconsin commission.

HUMPHREYS, A. C. Need for uniform accounts. *Public Service*, ii, 147-155 (1907). Reprint.

— The present and growing need for the general adoption of a uniform system of records and accounts. Proc., New England Association of Gas Engineers, 1907: 147-174. Discussion: pp. 174-187. For a supplementary paper, see his "Depreciation," Proc., American Gas Institute, ii, 307-353 (1907).

JOHNSON, GEORGE. Electric lighting accounts. London, 1904. 128 pp.

The Accountants' library, vol. xxix. On the books and accounting methods; technical.

KITTREDGE, A. O. An ideal system of street railway accounts.  
Street Railway Journal, xv, 30-32 (1899).  
Includes a chart illustrating the proposed system of accounts.

LAWTON, W. H. The new classification of electric railway expenses. Journal of Accountancy, vi, 114-122 (1908).  
Discussion of the Interstate commerce commission classification.

MCCOLL, DONALD. Tramway bookkeeping and accounts. London, 1902. 226 pp.  
Accountants' library, xv.  
Includes illustrative forms.

— Tramway bookkeeping and accounts simplified. London, 1907. 44 pp.  
Accountants' library, xlvi.  
Elementary and popular.

MILLER, H. C. Applying efficiency standards in central station accounting. Journal of Accountancy, xvi, 432-434 (1913).

MULHALL, J. F. J. A few experiences on the examination of waterworks accounts and management. Proc., American Waterworks Association, xxvii, 441-444 (1907).

— Quasi-public corporation accounting and management. Boston, 1905? 198 pp.  
An accounting textbook.

— Waterworks accounting. Journal of the New England Waterworks Association, xix, 395-403 (1905).  
Extracts from his "Quasi-public accounting and management."

National Electric Light Association. Standard classification of construction and operating accounts for electric light and power companies. ?, 1912? 129 pp.

NAU, C. H. Uniform systems of accounts for public utilities. Journal of Accountancy, xvii, 412-426 (1914).

NEAL, J. H. Where maintenance ends and depreciation begins. Proc., American Street and Interurban Railway Accountants' Association, 1907: 195-200.  
Discussion: pp. 200-202. Chiefly of accounting interest; with tables.

NUTTING, H. G. D. An accounting system for small central stations. *Electrical Review and Western Electrician*, lxiv, 221-226 (1914).

Outline of the accounts, with a number of illustrative forms.

PATTERSON, A. R. Organization of the accounting department of an electric railway and light company. *Proc., American Street and Interurban Railway Accountants' Association*, 1908: 35-44.

Discussion: pp. 44-60.

POWERS, L. G. Governmental regulation of accounting procedure. *Annals of the American Academy of Political and Social Science*, liii, 119-127 (1914).

Elementary argument as to the necessity of uniform accounting for proper regulation.

ROBSON, H. A. Municipal utilities' accounting. *Public Service Regulation*, ii, 465 (1913).

Chiefly on the necessity of supervision of the accounts of municipal plants.

SCHOLEFIELD, J. B. Engineering and accounting: their relation with special reference to public utilities. *Journal of the Association of Engineering Societies*, lli, 153-164 (1914).

On accounting in relation to valuation.

SCOBELL, E. C. Variations in public service systems of accounting. *Proc., National Electric Light Association*, 1914: accounting session, 188-193.

A brief résumé of some of the differences in the requirements of different commissions.

SIEFERT, C. A. Uniform classification. *Public Service Regulation*, i, 285-288 (1912).

A description of the water utility accounting under the Wisconsin commission.

STEVENS, F. W. Accounting in public service regulation. *Annals of the American Academy of Political and Social Science*, llii, 128-134 (1914).

Good elementary discussion of the necessity for uniform accounting; favors periodical audits.

WOLFF, MARK. Interpretation of waterworks accounts. *Journal of the American Waterworks Association*, iii, 529-556 (1916). A thorough study, with illustrative examples and many suggested forms; of accounting interest only.

YOUNG, P. S. Accounting methods of a holding company. *Proc., American Street and Interurban Railway Accountants' Association*, 1908: 107-113.

— The accounting of capital expenditures. *Proc., American Street and Interurban Railway Accountants' Association*, 1906: 50-57.  
Discussion: 58-79. Brief, with illustrative forms.

### SERVICE REGULATION

ABADY, JACQUES. Suggested testing regulations in the United States: a criticism. *American Gas Light Journal*, c, 103, 106-108 (1914).  
A criticism of Bureau of standards circular no. 32, "Standard regulations for manufactured gas and gas service."  
For a reply, see Rosa and McBride, "Standards for gas service."

BLOOD, W. H., JR. Improvements in central station service. *Public Service*, x, 173-174 (1911).  
The gain in twenty years' development of the electrical industry.

CADBURY, J. N. Regulating the quality of public utility service. *Annals of the American Academy of Political and Social Science*, liii, 262-268 (1914).  
A brief description of the Wisconsin commission's practice.

— Standards for gas and electric service. *Public Service Regulation*, ii, 94-99 (1913).  
An outline of proposed changes in the service standards of the Wisconsin commission; with brief discussion.

DEACON, W. G. The Chicago traction plan. *Public Service*, xiii, 165-172 (1912).  
Describes municipal control by engineering boards. Discusses the history of traction service in Chicago; with a map, charts and photographs.

DICKERMAN, J. C. Some notes on the regulation of gas service. *Annals of the American Academy of Political and Social Science*, liii, 278-284 (1914).  
Good, elementary.

DICKERMAN, J. C. Standards for gas service: established by public service commissions. *Utilities Magazine*, i, no. 6, 16-21 (1916).  
Supplementary to U. S. Bureau of standards, "Standards for gas service" (circular no. 32, 3d edition). Codification of the rules of all commissions.

— Standards of service clauses in street lighting contracts. *Utilities Magazine*, i, no. 2, 2-7 (1915).  
An elementary discussion of the various contracts now in use.

DOOLITTLE, F. W. Railway operation in Cleveland. *Electric Railway Journal*, xlvii, 359-364 (1916).

ELLIOTT, E. L. Indefinite candle power in municipal contracts. *Proc., National Electric Light Association*, 1907: vol. i, 246-252.  
Discussion: pp. 263-287. On the misunderstandings caused by indefinite standards in the contracts and the need for greater exactness.

ERICKSON, HALFORD. The advantages of state regulation. *Annals of the American Academy of Political and Social Science*, lvii, 123-162 (1915).  
Good service is emphasized as being at least as important as fair rates.

FERNALD, R. H. Service regulations for gas. *Annals of the American Academy of Political and Social Science*, liii, 269-277 (1914).  
A good elementary analysis of the provisions commonly enforced.

FORSTALL, A. E. Concerning gas standards. *Public Service*, iv, 12-14 (1908).

HARRIS, L. H. Service regulations for electrical utilities. *Annals of the American Academy of Political and Social Science*, liii, 285-291 (1914).  
Good elementary statement of principles.

HARRIS, R. W. A method for determining the adequacy of an electric railway system. *Trans., American Institute of Electrical Engineers*, xxix, 1495-1516 (1910).  
Technical, with tables and charts.

HOLMES, F. L. Standardization of service. (*In Regulation of railroads and public utilities in Wisconsin*. New York, 1915.) 57-68.  
A good annotated account of service regulation by the Wisconsin commission; very brief.

HUNTER, C. F. Commission's electrical testing outfit. *Public Service Regulation*, i, 333-335 (1912).  
Description of the testing equipment of the New York public service commission for the second district, illustrated with photographs.

INGHAM, W. B. Theory and practice of the skip-stop. *Aera*, iii, 1212-1215 (1915).

KING, C. L. Rules regulating water service adopted by state public service commissions. *Utilities Magazine*, i, no. 9, 19-23 (1916).  
Codification of the rules of all commissions.

KLUMPP, J. B. Summary of commission regulations governing gas supply. *American Gas Light Journal*, ciii, 75 (1915).  
An excellent tabular summary.

LEONARD, C. F. Gas service regulation in New York. *Public Service Regulation*, i, 455-458 (1912).  
Description of the testing equipment and methods of the New York public service commission for the second district, illustrated with photographs.

MACAEE, J. B. A view of the "no-seat-no-fare" proposition. *Electric Traction Weekly*, vi, 890-892 (1910).

MALTBIE, M. R. The fruits of public regulation in New York. *Annals of the American Academy of Political and Social Science*, xxxvii, 170-190 (1911).  
On the improved service resulting from the commission.

MEYER, B. H. State supervision of electric railways in Wisconsin. *Annals of the American Academy of Political and Social Science*, xxxvii, 160-169 (1911).

PENCE, W. D. The functions of a technical staff in public utility regulation. *Proc., Indiana Sanitary and Water Supply Association*, 1913: 114-142.  
Describes the work of the Wisconsin commission's technical staff and includes an outline of the inventory used and of the form of organization.

— Functions of a technical staff in the regulation of public utilities. *Engineering Record*, lxvii, 260-262 (1913).  
Abstract.

PENCE, W. D. The valuation and inspection work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Engineering News*, lxi, 227-229 (1909).

Abstract.

— Wisconsin service inspection and improvement. *Public Service Regulation*, ii, 167-171 (1913).

Abstract.

— The work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Journal of the Western Society of Engineers*, xiv, 73-100 (1909).

Discussion: pp. 100-111. A full account of the organization and work of the engineering department.

— — Engineering Record, lix, 10-12, 49-52, 73-75 (1909).

Reprint.

PIKE, C. W. Service standards for electric light and power companies as prescribed by public service commissions. *Utilities Magazine*, i, no. 5, 21-28 (1916).

See revised codification.

— — Utilities Magazine, i, no. 7, 30-40 (1916).

Revised codification of the rules of all commissions.

ROEMER, J. H. The causes and effects of a public utility commission. *Public Service*, xi, 37-39, 85-88 (1911).

Treats chiefly of the regulation of service by the Wisconsin commission.

— — Madison, 1911. 25 pp.

ROSA, E. B. The function of research in the regulation of natural monopolies. *Science*, new series, xxxvii, 579-593 (1913).

An account of the work of the Bureau of standards on service standards for public utilities.

— The government's part in regulation. *Public Service*, xviii, 141-143 (1915).

— The legal specifications for illuminating gas. *Proc., American Gas Institute*, vii, 223-253 (1912).

Discussion: pp. 254-272. Interesting résumé and comment on U. S. Bureau of standards circular no. 32, "State and municipal regulations for the quality, distribution and testing of illuminating gas."

ROSA, E. B. Research in the regulation of natural monopolies. *Gas Age*, xxxiv, 14-17 (1914).

—, and McBRIDE, R. S. Standards for gas service. *American Gas Light Journal*, c, 371-375 (1914).  
A reply to Jacques Abady, "Suggested testing regulations in the United States: a criticism."

SHAW, W. A. The development and importance of an adequate engineering department for a public service commission. *Journal of the Western Society of Engineers*, xx, 685-693 (1915).  
Discussion: pp. 693-696.

— The engineering department for a public service commission. *American Gas Light Journal*, civ, 147-148 (1916).  
Abstract.

SINSHEIMER, P. A. Ten rules for service: principles applied by the railroad commission of California to the regulation of public utility service. *Annals of the American Academy of Political and Social Science*, liii, 292-306 (1914).  
Good; elementary.

U. S. Bureau of Standards. Standard methods of gas testing. Washington, 1914. 180 pp.  
Circular no. 48; first edition.  
Second edition, 1916, 202 pp.  
Detailed; technical.

— Standard regulations for manufactured gas and gas service. Washington, 1913. 170 pp.  
Circular no. 32; second edition. Superseding "State and municipal regulations for the quality, distribution and testing of illuminating gas."  
Contains suggested regulations, and a review of existing regulations.  
Technical.

— Standards for electric service. Washington, 1916. 262 pp.  
Circular no. 56; first edition. An excellent classification and tabulation of the various state and municipal regulations; with discussion of proposed standards. Technical.

— Standards for gas service. Washington, 1915. 197 pp.  
Circular no. 32; third edition. Superseding "Standard regulations for manufactured gas and gas service."  
Consists largely of suggested regulations, but includes a summary of regulations now in force. Technical.

U. S. Bureau of Standards. State and municipal regulations for the quality, distribution, and testing of illuminating gas. Washington, 1912. 133 pp.

Circular no. 32; first edition. An excellent classification and tabulation. Technical.

VITTINGHOFF, HANS VON. The regulation of the service rendered by gas companies. Stone and Webster Public Service Journal, xi, 266-269 (1912).

Brief comment on U. S. Bureau of standards circular no. 32, "State and municipal regulations for the quality, distribution and testing of illuminating gas."

WADE, H. T. The national bureau of standards and standards for public utilities. Engineering Magazine, xl ix, 240-251 (1915).

WESTON, GEORGE. Supervising engineers and street railway service: the value of a board of supervising engineers in securing efficient street railway service. Annals of the American Academy of Political and Social Science, xxxvii, 191-202 (1911).

Chiefly historical.

WITT, PETER. Public favors skip-stop. Aera, iv, 224-227 (1915). Brief account of the plan used by the Cleveland railways.

WYMAN, BRUCE. Illegality as an excuse for refusal of public service. Harvard Law Review, xxiii, 577-589 (1910). An annotated legal study, referring chiefly to railroads.

### CONTROL OF CAPITALIZATION

AYRES, A. U. Governmental regulation of securities issues. Political Science Quarterly, xxviii, 586-592 (1913).

A good, brief survey of blue-sky legislation and commission control of capitalization.

BRANDEIS, L. D. Interlocking directorates. Annals of the American Academy of Political and Social Science, lvii, 45-49 (1915).

BULLOCK, C. J. Control of the capitalization of public service corporations in Massachusetts. Publications, American Economic Association, 3d series, x, 384-415 (1909).

Discussion: pp. 415-430.

CALKINS, GROSVENOR. The Massachusetts anti-stock-watering law. *Quarterly Journal of Economics*, xxii, 640-645 (1908). A brief account of the act of 1908.

ERICKSON, HALFORD. Regulation of public utilities: three discussions. *Madison*, 1911. 66 pp.  
Government regulation of securities issues: pp. 42-66.  
Elementary.

— Should government regulate security issues of public utilities? *Public Service*, xiii, 115-119 (1908).

ESHLEMAN, J. M. Should the public utilities commission have power to control the issuance of securities? *Annals of the American Academy of Political and Social Science*, liii, 148-161 (1914).  
Excellent general account of the desirability of securities regulation and of the arguments as to strict control *vs.* publicity.

FERRIN, A. W. Blue sky legislation. *Moody's Magazine*, xv, 221-226 (1913).  
A popular but interesting discussion of the Kansas law; including a proposed model bill.

GOODRICH, J. P. The public welfare and the holding company. *Annals of the American Academy of Political and Social Science*, lvii, 323-334 (1915).  
Emphasizes difficulty of regulating securities of holding companies.

GRAY, J. H. Competition and capitalization, as controlled by the Massachusetts gas commission. *Quarterly Journal of Economics*, xv, 254-276 (1901).

HEILMAN, R. E. Commission control of refunding utility securities. *Utilities Magazine*, i, no. 4, 26-30 (1916).  
Contains many citations of court and commission decisions.

— The development by commissions of the principles of public utility capitalization. *Journal of Political Economy*, xxiii, 888-909 (1915).  
An excellent annotated study, with a brief discussion of the attitude of the various commissions on important capitalization problems.

HOLMES, F. L. Regulation of stocks and bonds. (*In Regulation of railroads and public utilities in Wisconsin.* New York, 1915.) 237-248.

A good, brief account of the control of capitalization by the Wisconsin commission.

MEAD, E. S. The public service commission and the investor. *Lippincott's Monthly Magazine*, xc, 764-768 (1912).

A popular discussion of the control of capitalization by the New York commissions.

— State supervision of security issues. (*In Corporation finance.* New York, 1910.) 72-80.

MILLER, E. T. The Texas stock and bond law and its administration. *Quarterly Journal of Economics*, xxii, 109-119 (1907).

NEWCOMB, H. T. Government regulation of railway capitalization. *Railway World*, lv, 188-189, 208-209 (1911).

Treats of railroads only, but is of some interest for other public utilities.

POTTS, C. S. Texas stock and bond law. *Annals of the American Academy of Political and Social Science*, liii, 162-171 (1914).

History and discussion.

RIPLEY, W. Z. The capitalization of public service corporations. *Quarterly Journal of Economics*, xv, 106-137 (1900).

A thorough, fully annotated study; discusses railroads only, but is of some interest for other utilities. There is considerable attention paid to practice in Massachusetts.

— Public regulation of railroad issues. *American Economic Review*, iv, 541-564 (1914).

A good, thoroughly annotated discussion. Treats of railroads only, but is of interest for all public utilities.

— State regulation of security issues. (*In Railroads: finance and organization.* New York, 1915.) 281-312.

A very good discussion, with some historical treatment.

SCHAFF, MORRIS. Capitalization of earnings of public service companies. *Annals of the American Academy of Political and Social Science*, liii, 178-181 (1914).

SINSHIMER, P. A. Regulation of public utility securities. *Journal of Electricity, Power and Gas*, xxxiv, 294-296 (1915). Very general; refers especially to California.

SPENCER, A. W. The prevention of stock watering by public service corporations. *Journal of Political Economy*, xiv, 542-552 (1906). A good discussion of the principles of the regulation of securities issues and of the practice of the different states. The writer advocates separate state laws applying to public service corporations.

THOMPSON, R. A. Method used by the railroad commission of Texas, under the stock and bond law, in valuing railroad properties. *Trans., American Society of Civil Engineers*, lii, 328-345 (1904). Discussion: pp. 346-364. A brief, technical description of the methods used in taking the inventory, with illustrative forms and tables.

WRIGHTINGTON, S. R. Taxation of "guaranteed" stock in Massachusetts. *Green Bag*, xxiv, 8-17 (1912). An account of an attempt of the Boston and Maine railroad to dodge bond taxation by issuing "guaranteed stock."

## JUDICIAL REVIEW OF REGULATION

### GENERAL WORKS

BAKER, J. N. The limitation of state control over the regulation of rates. *Yale Law Journal*, xxi, 126-140 (1911). Discusses railroad regulation only, but is of general interest in regard to judicial review.

BAKER, N. D. Discussion of constitutional protection in valuation. *Utilities Magazine*, i, no. 3, 215-216 (1916).

BEALE, J. H., and WYMAN, BRUCE. Judicial review of commission action. (*In Railroad rate regulation*. 2d edition. New York, 1915.) 1021-1077. An excellent, annotated legal study. Refers only to the Interstate commerce commission, but is of interest for all public utilities.

FRIEDMAN, H. J. A word about commissions. *Harvard Law Review*, xxv, 704-716 (1912). An excellent discussion of whether commissions are legislative or judicial and of the importance of the decision; with citations.

KERR, W. D. Constitutional protection in valuation. *Utilities Magazine*, i, no. 3, 208-215 (1916).

LINDSLEY, VAN SINDEREN. Rate regulation of gas and electric lighting. New York, 1906. 165 pp.

"The object of this little book is to set forth, as concisely as the scope of the subject will permit, the legislative acts and decided cases in the several states affecting the business of supplying gas and electric light."

An excellent study.

MALTBIE, M. R. The commissions and the courts. *Public Service*, xii, 141-142 (1912).

Good; elementary.

— Judicial review of public regulation. *Journal of Political Economy*, xx, 480-491 (1912).

A very good article discussing the variation in practice of the different states, and including an argument against broad review.

— — Electric Traction Weekly, viii, 290-291 (1912).  
Abstract.

MATTHEWS, NATHAN, JR., and THOMPSON, W. G. Public service company rates and the fourteenth amendment. *Harvard Law Review*, xv, 249-270 (1901); 353-381 (1902).

Discusses railroad rates only, but is an excellent annotated study of decisions as to rate regulation and the extent of judicial review.

NEWCOMB, H. T. Constitutionality of the delegations in the interstate commerce law. *Railway World*, liv, 526-528, 546-550, 566-570 (1910).

Discussion limited to railroads, but is of interest in connection with the extent of judicial review in general.

— — Philadelphia, 1910. 43 pp.  
Reprint.

— The force and effect of the orders of the Interstate commerce commission. *Harvard Law Review*, xxiii, 12-29 (1909). Although treating only of railroad regulation, this interesting and thoroughly annotated study is of general interest in connection with the extent of judicial review.

POND, O. L. Methods of judicial review in relation to the effectiveness of commission control. *Annals of the American Academy of Political and Social Science*, liii, 54-65 (1914).

An excellent annotated classification of the commission laws of all states, with discussion.

POPE, HERBERT. Municipal contracts and the regulation of rates. *Harvard Law Review*, xvi, 1-21 (1902).  
On the validity and effect of contract and franchise provisions as to rates.

PROUTY, C. A. Court protection unsafe. *Public Service Regulation*, i, 246-249 (1912).  
The writer asserts that the legislature must dominate since the courts do not inspire confidence.

— The meaning of the constitutional protection in valuation. *Utilities Magazine*, i, no. 3, 204-208 (1916).  
On the extent of judicial review; elementary.

SMALLEY, H. S. Railroad rate control. *Publications, American Economic Association*, 3d series, vii, 327-473 (1906).  
Excellent article on all aspects of judicial review. Treats of railroads only, but is of interest for all public utilities.

WYER, S. S. Regulation, valuation and depreciation of public utilities. Columbus, 1913. 313 pp.  
Protection of public utilities from adverse legislation: pp. 78-85.  
Requirements of regulation: pp. 86-95.  
Relief from oppressive legislation: pp. 96-100.  
Composed largely of quotations from books, articles and cases.

WYMAN, BRUCE. Jurisdictional limitations upon commission action. *Harvard Law Review*, xxvii, 545-569 (1914).  
An excellent annotated legal study.

#### HISTORY

ADAMS, A. D. Reasonable rates. *Journal of Political Economy*, xii, 79-97 (1903).  
A very excellent, concise review of all the United States Supreme Court's decisions on rate regulation, with brief discussion.

BAKER, J. N. Limiting state regulation. *Public Service Regulation*, i, 185-190 (1912).  
Abstract of "The limitation of state control over the regulation of rates."

BARROW, W. M. State railroad commissions and the courts. *Freight*, vi, 201-207 (1906).  
A discussion of judicial review, with a list of the powers of the various commissions and syllabi of litigated cases.

HOLMES, F. L. Commission and the courts. (*In* Regulation of railroads and public utilities in Wisconsin. New York, 1915.) 317-344.

On the history of judicial review in Wisconsin, with many quotations from decisions.

JOHNSON, E. R., and VAN METRE, T. W. The courts and railroad regulation. (*In* Principles of railway transportation. New York, 1916.) 535-563.

A brief historical sketch.

— The courts and railway regulation. (*In* American railway transportation. 2d revised edition. New York, 1909.) 386-407.

— — (In Elements of transportation. New York, 1909.) 146-152.

RIPLEY, W. Z. The determination of reasonable rates. (*In* Railroads: finance and organization. New York, 1915.) 313-330.

Interesting as tracing the history of judicial review.

SHARFMAN, I. L. The regulation of railway rates. (*In* Railway regulation. Chicago, 1915.) 87-111.

Outlines the development of rate regulation and of the doctrine of judicial review, pp. 87-100. Includes many quotations from decisions and citations.

## V. VALUATION

### GENERAL WORKS

#### BOOKS

DARRACH, C. G. *Valuation of the properties of public utility corporations.* Philadelphia, 1913. 61 pp.

Outlines a proposed theory of valuation. Includes tables and charts; technical.

FLOY, HENRY. *Valuation of public utility properties.* New York, 1912. 390 pp.

- Ch. i. Introduction.
- ii. Glossary.
- iii. Public service commissions.
- iv. Making an appraisal.
- v. Structural costs.
- vi. Development expenses, intangible expenses, non-physical costs, overhead expenses.
- vii. Franchises, good will, going value, contracts.
- viii. Depreciation.
- ix. Appraisals of public utility properties in greater New York.
- x. Examples of important appraisals.

A good textbook, chiefly of engineering interest. Includes many quotations from other writers and from court and commission cases; also many tables of results of different appraisals.

— *Value for rate making.* New York, 1916. 322 pp.

- Ch. i. Introduction.
- ii. Definitions.
- iii. Fundamentals in valuation.
- iv. Fair value for rate making.
- v. Cost of reproduction.
- vi. Land, paving and water rights.
- vii. Franchises, working capital and bond discounts.
- viii. Going value.
- ix. Depreciation.

An excellent treatise; discusses both theories and methods with many quotations from other writers and from court and commission cases. Of special interest to engineers; somewhat technical.

**FOSTER, H. A.** Engineering valuation of public utilities and factories. New York, 1912. 345 pp.

Ch. i. Value.

- ii. Purposes of valuation.
- iii. Directions for the valuation of tangible property.
- iv. Instructions for valuation.
- v. Forms for use in making a valuation.
- vi. The cost of valuing a property.
- vii. Value of good will, going concern or going value.
- viii. Depreciation.
- ix. Amortization.
- x. Handling of depreciation funds.
- xi. Appreciation.
- xii. Franchise.
- xiii. Capitalization.
- xiv. Control of public utilities.
- xv. Court decisions.

A valuable textbook, with more attention to the engineering work of valuation than is usual. Composed largely of quotations from other writers and from court and commission cases.

**HAYES, H. V.** Public utilities: their cost new and depreciation.

New York, 1913. 262 pp.

Ch. i. Property valuations: general considerations.

- ii. Replacement costs of physical property.
- iii. Determination of replacement cost.
- iv. Value as going concern.
- v. Values of good will and franchises.
- vi. Original cost.
- vii. Commercial value.
- viii. The worth of service to the consumer.
- ix. Reserves for depreciation.
- x. Life of plant.
- xi. Depreciation.
- xii. Fair present value: rates.
- xiii. Fair present value: condemnation or sale.
- xiv. General consideration relative to the regulation of public utility undertakings.

A good, elementary work on all phases of the subject.

— Public utilities: their fair present value and return. New York, 1915. 207 pp.

Ch. i. The present controversy.

- ii. Ascertainment of fair present value.
- iii. Fair rate of return.
- iv. Replacement cost.

Ch. v. Actual original cost.

vi. Going value.

vii. Depreciation.

Supplementary to his "Public utilities: their cost new and depreciation." A very good, elementary work, considering principles more fully than the previous volume.

**MARKS, W. D.** Practical rate making and appraisement. South Hadley, 1914? 269 pp.

Ch. i. General consideration.

ii. Report upon gas rates and prices for the city of Spokane, 1913.

iii. Report upon the fair and reasonable price of a 6.6 ampere magnetite arc light per year, Minneapolis, 1911.

iv. Quantity rates for electricity.

v. Methods of appraisement.

vi. Present value; structural cost of reproduction; original cost; structural cost of reduplication.

vii. Overhead charges.

viii. Depreciation.

ix. Comparative appraising.

x. Market value; English going value.

xi. Franchise value.

xii. Present value of prospective profits; good will; development expense; going value; intangible values; options.

xiii. Books and accounts; operating expenses and income.

xiv. The law of demand for electricity; reduction of price increases profits.

xv. Gas sales per capita; verification of law of demand.

xvi. The London sliding scale; Marks' dividing scale.

xvii. Capitalization, assets and profits of Massachusetts gas companies.

**Utilities Magazine.** Proceedings of the Conference on valuation.

Utilities Magazine, i, no. 3, 227 pp.

Criticism of reproduction theory of valuation. J. M. Eshleman.

Reproduction value *vs.* fair value. H. F. French.

Relation of reproduction cost to fair value. Morris Knowles.

Fallacy of the "reproduction cost" theory in determining the value of public utilities. A. B. Du Pont.

How to get rid of the reproduction cost theory. G. W. Anderson.

Original cost as the chief basis for fair value. E. W. Bemis.

Original cost. Halford Erickson.

Constitutionality of historical cost method of public utility valuation.

Alfred Bettman.

Theory of franchise values. Alfred Bettman.

Principles to be applied in valuing land. H. V. Hayes.

Land values under the Minnesota rate case. T. D. O'Brien.

The measurement of land values. E. W. Doty.

Principles to be applied in valuation of land used for the purpose of a common carrier. A. E. Helm.

Discussion of principles to be applied in valuing land. F. W. Stevens.

The proper treatment of appreciation of land. M. R. Maltbie.

Depreciation defined. F. P. Stearns.

Court decisions on depreciation. J. H. Goetz.

Depreciation and its relation to the fair value. Halford Erickson.

A criticism of theoretical depreciation. J. E. Allison.

Making depreciation discussion understood. Harry Barker.

Going value as an element of fair value. Clifford Thorne.

Going value in purchase *vs.* rate cases. A. M. Fox.

The problem of unit prices in valuation. M. G. Glaeser.

Financial aspects of valuation. P. A. Sinsheimer.

Financial aspects of regulation. R. C. Wood.

The making and maintenance of priced inventories of public utilities. C. L. Pillsbury.

Some essentials of appraisal work. F. W. Ballard.

Coöperation in making inventories. R. J. Meigs.

Valuation by approximation. J. G. Morse.

Correct valuation of operating and managerial methods. W. N. Polakov.

Expert (or opinion) testimony in rate valuation cases. J. H. Gray.

Actual cost. R. H. Whitten.

Fair value in practice. E. P. Burch.

Principles as to franchise values. D. F. Wilcox.

Determining franchise values. H. D. Baldwin.

Some distinctions between the legal and administrative phases of franchise valuation. C. A. McLain.

The meaning of the constitutional protection in valuation. C. A. Prouty.

Constitutional protection in valuation. W. D. Kerr.

Constitutional protection in valuation. N. D. Baker.

Valuation and the future of public utilities. M. R. Maltbie.

A very good symposium on many phases of the subject, largely from the public's viewpoint.

WHITTEN, R. H. Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase. New York, 1912-1914. 2 vols.

Ch. i. Purpose of valuation.

- ii. Fair value for rate purposes.
- iii. Market value as a standard for rate purposes.
- iv. Cost of reproduction as a standard of value for rate purposes.
- v. Actual cost as a standard of value for rate purposes.
- vi. Valuation of land.
- vii. Pavement over mains.
- viii. Property donated or acquired without cost.

- Ch. ix. Property constructed out of surplus.
- x. Unused property.
- xi. Average price *v.* present price.
- xii. Overhead charges.
- xiii. Discount on bonds.
- xiv. Working capital.
- xv. Piecemeal construction.
- xvi. Adaptation and solidification.
- xvii. Physical depreciation.
- xxviii. Cost new *v.* cost less depreciation.
- xix. Functional depreciation.
- xx. Annual depreciation allowance.
- xxi. Going concern in purchase cases.
- xxii. Going concern in rate cases.
- xxviii. Going concern as the value of a created income.
- xxiv. Going value rule of Wisconsin railroad commission.
- xxv. The theory of going concern value.
- xxvi. Franchise value in purchase cases.
- xxvii. Franchise value in rate cases.
- xxviii. Appraisal of franchise value.
- xxix. The theory of franchise value.
- xxx. Rate of return.
- xxxi. Rules for appraisers in Maine condemnation cases.
- xxxii. Bibliography of valuation and depreciation.

A very excellent treatise; the standard work on the subject. Each chapter consists of economic and theoretical discussion, together with very full quotations from all important court and commission cases.

Volume ii is supplementary to volume i, and contains the decisions from 1912 to the spring of 1914. The chapter headings in the two volumes are practically identical.

**WOOLFOLK, W. G.** Appraisal of public utility properties. Indianapolis ? 1915 ? 39 pp.

Method of making the appraisal, with forms; and a brief discussion of valuation in general.

**WYER, S. S.** Regulation, valuation and depreciation of public utilities. Columbus, 1913. 313 pp.

An excellent and comprehensive work, composed very largely of classified quotations from books, articles, and cases. Not very readable, but contains much of interest for both layman and expert. For list of chapters, see p. 8.

**YOUNG, C. G.** Logical basis for valuations of interurban street railways. New York, 1911. 32 pp.

Reprint of paper before Central electric railway association.

## ARTICLES

ADAMS, A. L. Valuation of waterworks. *Municipal Journal*, xxxii, 942-944 (1912).

Abstract.

— The principles governing the valuation for rate fixing purposes of waterworks under private ownership. *Journal of the Association of Engineering Societies*, xxxvi, 37-56 (1906). A very good general discussion.

— — — *Engineering Record*, lii, 153-157 (1905).

Abstract.

ADAMS, H. C. Valuation of public service industries. *Electric Railway Journal*, xxxv, 314 (1910).

Abstract.

— Valuation of public service utilities. *Publications, American Economic Association*, 3d series, xi, 184-195 (1910).

On the reasons why a valuation is necessary.

ALLISON, J. E. Ethical and economic elements in public service valuation. *Quarterly Journal of Economics*, xxvii, 27-49 (1912).

A very good discussion of all theories of valuation, the writer favoring original cost.

ALMERT, HAROLD. Valuing the property of public utilities. *Public Service*, xii, 65-66 (1912).

ALVORD, J. W. Fundamental principles of public utility valuation. *Trans., American Society of Civil Engineers*, lxxix, 117-165 (1915).

Discussion: pp. 166-237. An excellent statement of valuation fundamentals. The writer distinguishes between cost and value, and considers various theories of valuation at some length. Includes a list of important legal decisions.

— The necessary elements for waterworks valuation. *Engineering News*, lxiii, 286-287 (1910).

ARNOLD, B. J. Foundation principles in valuation. *Electric Railway Journal*, xlvi, 713-719, 803-806 (1915).

Abstract.

ARNOLD, B. J. Foundation principles of utility valuation with special application to plans for resettlement. *Aera*, iv, 189-214 (1915).

Abstract.

— Foundation principles of utility valuation with special application to resettlement plans. *Proc., American Electric Railway Association*, 1915: 139-187.

Discussion: pp. 188-198. An excellent and thorough study of the principles underlying all valuation problems. Includes notes on the franchise resettlements in Chicago, Kansas City and San Francisco, with charts, and a glossary of terms.

BALDWIN, H. DEF. On the valuation of waterworks' special franchises. *Proc., American Waterworks Association*, xxxiii, 9-43 (1913).

Discussion: pp. 43-47. The writer discusses valuation methods and problems and regards franchise value as based on a return above "fair return."

BARKER, HARRY. How to appraise water rights. *Engineering News*, lxxv, 1179-1182 (1916).

A brief but thorough, semi-technical account.

BINCKLEY, G. S. Why appraisal is not valuation. *Engineering Record*, lxxii, 515-517 (1915).

Hazard, past profits and probable obsolescence must be taken into account in finding true value. A good analysis.

BRYAN, W. H. The appraisal and depreciation of waterworks and similar properties. *Journal of the Association of Engineering Societies*, xxxix, 336-366 (1907).

Discussion: pp. 367-381. A very good, concise summary of valuation theories and kinds of depreciation, with discussion. Includes charts and a table of estimated life and depreciation of machinery and plant (pp. 362-365).

BURDICK, C. B. Valuation of waterworks plants. *Municipal Journal and Engineer*, xxiii, 302-304 (1907).  
Elementary.

— The valuation of waterworks properties. *Engineering-Contracting*, xxviii, 238-241 (1907).

BURGESS, PHILIP. Some features of engineering appraisements of waterworks properties. *Proc., Central States Waterworks Association*, 1913: 16-23.

Discussion: pp. 23-31. On valuation problems and methods.

BURNS, C. S. Determination of physical values. *Engineering Record*, lii, 328-329 (1905).  
Emphasizes need of mathematical precision in valuations. Waterworks valuations used for illustration. Technical.

BUTLER, PIERCE. "Valuation of railway property for purposes of rate regulation." *Journal of Political Economy*, xxiii, 17-33 (1915).  
The writer believes value for rate regulation is the same as for condemnation, that rates cannot be based on value and that the agency theory is untenable.

COOKE, M. L. Experts in valuation cases. *Utilities Magazine*, i, no. 5, 19-20 (1916).  
Includes tables of data from valuation cases, illustrating writer's arguments. An attempt to show that the companies' valuations are inflated.

COOLEY, M. E. Factors determining a reasonable charge for public utility service. *Trans., American Institute of Electrical Engineers*, xxxii, 2077-2095 (1913).

— — — *Journal of the Western Society of Engineers*, xix, 1-17 (1914).

— — — *Public Service*, xvi, 45-46, 60-62, 97-98, 129-130 (1914).  
Abstract.

CORY, C. L. Rates for gas service. *American Gas Light Journal*, xciv, 252-253, 259-263 (1911).  
Chiefly a popular discussion of valuation problems.

—, VINCENT, W. G., JR., and NORTON, W. J. Symposium on inventories and appraisals of properties. *Trans., American Institute of Electrical Engineers*, xxxiv, 2023-2050 (1915).  
Part I, by C. L. Cory (pp. 2023-2030), gives a brief résumé of valuation theories.  
Part II, by W. G. Vincent, Jr. (pp. 2031-2040), treats of the method of taking the inventory.  
Part III, by W. J. Norton (pp. 2041-2050), discusses working capital.

CROSBY, O. T. Physical valuations. *Proc., American Electric Railway Association*, 1911: 368-382.  
Discussion: 383-398. Why and when valuations should be made.

DRUAR, J. F. Rates and rate making. *Journal of the Association of Engineering Societies*, I, 221-233 (1913).

An elementary discussion of valuation problems and of electric rate making.

Electrical World. On what basis shall public utilities be valued? *Electrical World*, lxvi, 1125-1129 (1915).

Abstracts of all important papers before Conference on valuation.

For the full papers, see *Utilities Magazine*, "Proceedings of the Conference on valuation."

ERICKSON, HALFORD. Making rates for electric plants. *Public Service Regulation*, I, 579-585 (1912).

Elementary.

— Principles of valuation of public utilities. *Public Service Regulation*, I, 294-300, 370-377 (1912).

A good discussion of various problems and methods.

FINK, HENRY. Valuation of railroad property. *Railway Age Gazette*, xlv, 587-588, 627-634 (1908).

FOSTER, H. A. Purposes of valuation. (*In* *Engineering valuation of public utilities and factories*. New York, 1912.) 27-32.

An account of the various uses to which a valuation can be put.

GANDOLFO, J. H. The valuation of public utility property. *Trans., American Society of Civil Engineers*, lxxix, 842-878 (1915).

Discussion: pp. 879-918. An excellent discussion, the writer advocating actual cost as the chief basis of valuation.

GILLETTE, H. P. The appraisal of electric properties and the uses to which appraisals may be put. *Engineering and Contracting*, xxxvi, 506-507 (1911).

— The uses of an appraisal. *Electric Railway Journal*, xxxviii, 948-949 (1911).

Brief statement of twelve uses of an appraisal of electrical property, and discussion of the distinctions between the values for different purposes.

— The valuation of waterworks properties. *Engineering and Contracting*, xlvi-xlv (1915-1916).

Inventorying a waterworks plant, xliii, 394-395 (1915).  
 Estimating accrued depreciation: inspections and tests *vs.* life formulas, xliii, 486-488.  
 The appraisal of "overhead costs," xliv, 14-18 (1915).  
 Appraisal of reservoir site value, xliv, 80-81.  
 Appraisal of water right values, xliv, 157-158.  
 Appraisal of development cost or going value and franchise value, xliv, 258-261.  
 Appraisal of working capital, xliv, 356.  
 Detailed appraisal of a waterworks, xliv, 424-427.  
 Prorating the plant value to different uses, xlv, 9-11 (1916).  
 The rate of "fair returns," xlv, 99-100.  
 Some disputed points in waterworks valuation, xlv, 362-363.  
 An excellent series of articles on all phases of the subject.

**GRAHAM, D. A.** The appraisal of waterworks properties. *Engineering News*, lxix, 677-678 (1913).  
 Elementary.

— — — Engineering Record, lxvii, 532-534 (1913).  
 — — — Public Service, xvi, 57-59 (1914).

**GRUHL, EDWIN.** Recent tendencies in valuations for rate making purposes. *Annals of the American Academy of Political and Social Science*, liii, 219-237 (1914).  
 An excellent review of court and commission attitude, with many quotations from the cases. Summarizes the conclusions.

**GRUNSKY, C. E.** The appraisal of public service properties as a basis for the regulation of rates. *Trans., American Society of Civil Engineers*, lxxv, 770-843 (1912).

Discussion: pp. 844-876. A long technical paper, including formulae, tables and charts. The writer attempts to prove that depreciation should not be deducted in valuations, that it should be included in rates, and that there is ordinarily no definite basis for "going value" and similar intangibles.

**GUERNSEY, N. T.** Principles of railway valuation. *Electric Railway Journal*, xlvii, 249-252 (1916).

— Valuation: a common sense view. *Aera*, iv, 683-697, (1916).

Discussion: (1) From standpoint of a public official. George Weston, 698-707. (2) A suggestion for standard definitions. P. J. Kealy, 707-710.

A somewhat elementary general discussion.

HAYES, H. V. Ascertainment of fair present value. (*In Public utilities: their present value and return.* New York, 1915.) 19-80.  
A good, non-technical discussion of the differences in valuation for companies new and old, successful and unsuccessful.

— Original cost versus replacement cost as a basis for rate regulation. *Quarterly Journal of Economics*, xxvii, 616-629 (1913).  
A good discussion; the consideration of both methods being recommended.

— Property valuations: general considerations. (*In Public utilities: their cost new and depreciation.* New York, 1913.) 1-17.

HILL, N. S., JR. Valuation of public utilities. *Proc., Municipal Engineers of the City of New York*, 1914: 36-67.  
Discussion: pp. 68-167. Includes tabular analyses of all valuation elements.

HOLMES, F. L. Physical valuation of railroads and utilities. (*In Regulation of railroads and public utilities in Wisconsin.* New York, 1915.) 21-42.  
Discusses the work and theories of the Wisconsin commission, but is a good elementary discussion of valuation in general.

HOXIE, G. L. Some features of rate fixing for electric public service properties. *Journal of Electricity, Power and Gas*, xxviii, 397-399 (1912).

JACKSON, D. C. Appraisals of electric light and power properties. *Proc., National Electric Light Association*, 1914: accounting session, 163-183.  
Discussion: pp. 184-187.

JAMES, E. W. The ethical principle in physical valuation for rate making. *Popular Science Monthly*, lxxxvi, 153-163 (1915).  
A general, non-technical discussion of the need for valuation and valuation theories and methods. The writer emphasizes the need for greater recognition of the personal element.

JONAH, F. G. The valuation of railroads. *Journal of the Association of Engineering Societies*, lii, 121-135 (1914).  
A general discussion of valuation theories, the purpose of various valuations, and the work of the valuation engineer.

JURGENSEN, D. F. Wrong basis for rates. *Public Service Regulation*, i, 699-703 (1912).  
A criticism of reproduction cost new, favoring "fair value."

KERR, W. D. Public *vs.* private ownership. *Electric Railway Journal*, xliv, 723-725 (1914).  
Deals chiefly with the effect of valuations on the municipal ownership movement.

KIERSTED, WYNKOOP. Valuation of waterworks property. *Trans., American Society of Civil Engineers*, xxxviii, 115-133 (1897).  
Discussion: pp. 134-214. A very good, early discussion of the principles and theories of valuation, with illustrative examples.

McFALL, R. J. Railway monopoly and rate regulation. *Columbia University Studies in History, Economics and Public Law*, lxix, 1-223 (1916).  
Ch. ii. Valuation as a criterion of railway ability.  
Considers railroads only, but chapter ii is of some general interest.

MALTBIE, M. R. Valuation and the future of public utilities. *Utilities Magazine*, i, no. 3, 218-222 (1916).  
General but suggestive discussion of the far reaching results of utility valuation.

MEAD, D. W. The arbitration or appraisal of the values of public utilities. *Proc., American Waterworks Association*, xxii, 132-140 (1902).  
Includes an elementary discussion of valuation theories and methods.

METCALF, LEONARD. Waterworks valuation and fair rates. *Public Service*, v, 185-188 (1908).  
Abstract.  
— Waterworks valuation and fair rates in the light of the Maine supreme court decisions in the Waterville and Brunswick cases. *Trans., American Society of Civil Engineers*, lxiv, 1-74 (1909).  
Discussion: pp. 75-111. Includes comprehensive tables of the elements of value; and formulae. Technical.

NASH, L. R. Valuation of public service properties. *Stone and Webster Public Service Journal*, xi, 241-260 (1912).  
A good, annotated and somewhat elementary article.

NASH, L. R. Valuation of public service properties. *Public Service*, xiv, 53-55, 103-105, 143-145 (1913).  
Reprint.

— — — Electrical Engineer, xlv, 489-491 (1913).

NETHERCUT, E. S. Valuation of operating properties. *Electric Railway Journal*, xxxv, 945-947 (1910).  
Abstract.

— — — Electric Traction Weekly, vi, 592-595 (1910).  
Abstract.

RIFENBERICK, R. B. Something along the line of physical and intangible valuation as covered by recent legislation. *Electric Railway Journal*, xli, 1163-1167 (1913).  
Abstract.

RIGGS, H. E. The valuation of public service corporation property. *Trans., American Society of Civil Engineers*, lxxii, 1-173 (1911).  
Discussion: pp. 174-300. Includes discussion of the various state railroad appraisals; a review of the theories and methods of valuation; and gives forms for inventories. Rather technical.

RIPLEY, W. Z. The investor's interest in railroad valuations. *Journal of Political Economy*, xxiii, 34-48 (1915).  
A defense of physical valuation as insuring fair treatment of the investor.

— Physical valuation of railroads. *Political Science Quarterly*, xxix, 569-599 (1914).  
An annotated critical and historical study, of some interest for municipal utilities.

— Physical valuation: reasonable rates. (*In Railroads: finance and organization*. New York, 1915.) 331-370.  
A good general discussion of the various theories. Treats of railroads only, but is of general interest.

ROYCE, F. P. Valuation: a fair return and reasonable capitalization. *Stone and Webster Public Service Journal*, ix, 7-25 (1911).  
Elementary; with the outlines of a method of financing which will cause securities to approximate actual value.

SHARFMAN, I. L. The regulation of railway rates. (*In Railway regulation*. Chicago, 1915.) 87-111.  
A good elementary account. Includes a discussion of the various theories of valuation, with citations of cases (pp. 100-111).

SILCOCK, E. J. The valuation of waterworks undertakings on transfer to municipal authorities. *Surveyor, Municipal and County Engineer*, xlvi, 921-923 (1913).

STEVENS, F. W. Mooted principles in valuation. *Proc., American Electric Railway Association*, 1914: 23-39.

On the "distinctions if any between valuation of the properties of public utilities for purposes of rate making, imposition of service requirements, municipal acquisition, issue of capital securities and taxation." Includes many citations.

— — — Aera, iv, 335-349 (1914).

Reprint.

— — — *Electric Railway Journal*, xliv, 913-915 (1914).

Abstract.

THOMAS, J. J. Depreciation and valuation. *Journal of Accountancy*, xxi, 24-33 (1916).

A short analysis, from the accountant's standpoint, of valuation theories and the depreciation problem.

WAGNER, B. M. Rates for water supply. *Journal of the New England Waterworks Association*, xxix, 1-48 (1915).

Includes a summary of valuation theories.

WHITRIDGE, F. W. Official valuations of private property. *Publications, American Economic Association*, 3d series, xi, 239-252 (1910).

Opposes valuations as being unnecessary.

— — — *Electric Railway Journal*, xxxv, 110-112 (1910).

Abstract.

WHITTEN, R. H. Certain principles of valuation in rate cases. *Annals of the American Academy of Political and Social Science*, liii, 182-197 (1914).

An excellent elementary discussion of valuation theories and problems.

— Fair value for rate purposes. *Harvard Law Review*, xxvii, 419-436 (1914).

An excellent non-technical study of the various theories of valuation and their modifications.

— Valuation of public utilities. (*In* McLAUGHLIN, A. C., and HART, A. B. *Cyclopedia of American government*. New York, 1914.) iii, 606.

WILCOX, D. F. Capitalization, capital values, appraisals and purchase price. (*In* Municipal franchises. New York, 1911.) ii, 780-802.  
Includes a brief, popular discussion of valuation theories and problems.

WILGUS, W. J. Physical valuations of railroads. *Trans., American Society of Civil Engineers*, lxxvii, 203-224 (1914).  
Discussion: pp. 225-345. A good, somewhat elementary discussion of valuation theories and problems. Treats of railroads only, but is of interest for all public utilities.

WILSON, C. P. Financing public utilities under state control and service rate and rate of return. *Proc., Indiana Gas Association*, 1916: 35-39.  
Discussion: pp. 39-51. On valuation and rate of return. Considers 8 to 10 per cent fair.

WOOLFOLK, W. G. Appraisal of public utility properties. *Canadian Engineer*, xxviii, 629-632 (1915).

WYER, S. S. Natural gas valuation. *Public Service Regulation*, iii, 195 (1914).  
A brief analysis of the elements and factors to be considered.

— Rate regulation of electric power. *Cassier's Magazine*, xxxv, 402-415 (1909).  
A digest of the Columbus railway and light company case. Interesting as a general discussion of valuation and rate regulation.

— Valuation. (*In* *Regulation, valuation and depreciation of public utilities*. Columbus, 1913.) 159-175.  
Composed largely of classified quotations from books, articles and cases. An excellent, semi-technical treatment of the general subject of valuation; includes tables and a chart.

YOUNG, C. G. Logical basis for valuations of interurban street railways. *Electrical Review and Western Electrician*, lviii, 180-181, 231-237 (1911).  
Long abstract of paper before Central electric railway association. A good analysis of the elements and methods of valuation.

— — — Electric Railway Journal, xxxvii, 115-118 (1911).  
Abstract.

— — — Electric Traction Weekly, vii, 67-71 (1911).  
Abstract.

— — — Engineering News, lxv, 141-143 (1911).  
Abstract.

## HISTORY

## UNITED STATES — GENERAL

FLOY, HENRY. Examples of important appraisals. (*In* Valuation of public utility properties. New York, 1912.) 333-386.

Composed chiefly of tables, with brief comment.

FORD, F. R. Valuation of intangible street railway property. Annals of the American Academy of Political and Social Science, xxxvii, 119-141 (1911).  
On the treatment of intangibles in certain traction valuations.

GRUHL, EDWIN. Recent tendencies in valuations for rate making purposes. Annals of the American Academy of Political and Social Science, liii, 219-237 (1914).  
An excellent review of court and commission attitude, with many quotations from the cases. Summarizes the conclusions.

HEILMAN, R. E. Development by commissions of the principles of public utility valuation. Quarterly Journal of Economics, xxviii, 269-291 (1914).  
An excellent annotated study, with a brief discussion of the attitude of the various commissions on certain important valuation problems.

RIGGS, H. E. The valuation of public service corporation property. Trans., American Society of Civil Engineers, lxxii, 1-173 (1911).  
Discussion: pp. 174-300. Includes discussion of the various state railroad appraisals; rather technical.

RIPLEY, W. Z. Physical valuation of railroads. Political Science Quarterly, xxix, 569-599 (1914).  
An annotated critical and historical study, of some interest for municipal utilities.

— Physical valuation; reasonable rates. (*In* Railroads: finance and organization. New York, 1915.) 331-370.

WHITTEN, R. H. Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase. New York, 1912-1914. 2 vols.

A very excellent treatise; the standard work on the subject. Each chapter consists of economic and theoretical discussion, together

with very full quotations from all important court and commission cases.

Volume ii is supplementary to volume i, and contains the decisions from 1912 to the spring of 1914. The chapter headings are practically identical.

Excellent for an exhaustive account of the legal history of valuation. For list of chapters, see p. 199.

#### CALIFORNIA

##### *San Francisco*

ARNOLD, B. J. Foundation principles of utility valuation with special application to resettlement plans. Proc., American Electric Railway Association, 1915: 139-187.

Discussion: pp. 188-198. Notes on San Francisco traction resettlement: pp. 176-178; includes a chart.

#### ILLINOIS

##### *Chicago*

ARNOLD, B. J. Foundation principles of utility valuation with special application to resettlement plans. Proc., American Electric Railway Association, 1915: 139-187.

Discussion: pp. 188-198. Notes on Chicago traction resettlement: pp. 169-173; includes charts.

OSSOSKI, SIDNEY. The basis of valuation in case of municipal purchase of street railways. *Electric Railway Journal*, xxxvi, 999-1000 (1910).

Procedure at Cleveland and Chicago used for illustration.

#### IOWA

##### *Waterloo*

MARSTON, A. The valuation for city purchase of the property of the Waterloo (Ia.) waterworks co. *Engineering News*, lxi, 424-425 (1909).

A very brief account, with tables of data.

#### MICHIGAN

WILLIAMS, W. H. Railway capital and values. *Railroad Age Gazette*, xlvi, 761-762, 805-808, 845-846, 903-905 (1909).

On the valuation of Michigan railroads.

## MISSOURI

*Kansas City*

ARNOLD, B. J. Foundation principles of utility valuation with special application to resettlement plans. Proc., American Electric Railway Association, 1915: 139-187.  
Discussion: pp. 188-198. Notes on Kansas City traction valuation: pp. 167-168.

## NEBRASKA

HURD, E. C. The organization for and methods and results of physical valuation in Nebraska. Engineering and Contracting, xxxvi, 694-696 (1911).

— — — Engineering and Contracting, xxxviii, 136-138 (1912).

## NEW JERSEY

HANSEL, CHARLES. The valuation of railroads in New Jersey. Engineering Record, lxiii, 594-599 (1911).

Discusses the valuation for taxation, with brief reference to the experience of other states. Of some interest for municipal utilities.

## NEW YORK

*New York*

FLOY, HENRY. Appraisals of public utility properties in greater New York. (*In* Valuation of public utility properties. New York, 1912.) 218-232.

Composed largely of the tables of valuation results, taken from the reports of the appraisals.

FORD, F. R. The theory of street railway rate regulation as developed in the Coney Island fare case. Proc., American Street and Interurban Railway Association, 1910: 159-168.  
Discussion: pp. 169-186.

— — — Electric Railway Journal, xxxvi, 752-755 (1910).  
Abstract.

## OHIO

*Cleveland*

OSSOSKI, SIDNEY. The basis of valuation in case of municipal purchase of street railways. Electric Railway Journal, xxxvi, 999-1000 (1910).

Procedure at Cleveland and Chicago used for illustration.

## OREGON

DEARBORN, R. H. Physical valuation of electrical properties in Oregon. *Journal of Electricity, Power and Gas*, xxviii, 49-50 (1912).

The valuations made by the Oregon commission are believed by the writer to be uniformly low.

## TEXAS

THOMPSON, R. A. Method used by the Railroad commission of Texas, under the stock and bond law, in valuing railroad properties. *Trans., American Society of Civil Engineers*, lii, 328-345 (1904).

Discussion: pp. 346-364. A brief, technical description of the methods used in taking the inventory, with illustrative forms and tables.

*San Antonio*

POTTER, ALEXANDER. An important waterworks rate and appraisal investigation. *American City*, viii, 65-73 (1913).

A popular account of an appraisal made by the writer.

## WASHINGTON

BERGLUND, ABRAHAM. Valuation of railroads in the state of Washington. *Journal of Political Economy*, xxi, 332-344 (1913).

An historical account, with tables of results.

## WISCONSIN

HOLMES, F. L. Physical valuation of railroads and utilities. (*In Regulation of railroads and public utilities in Wisconsin. New York, 1915.*) 21-42.

A good, annotated account of the valuation work and theories of the Wisconsin commission.

PENCE, W. D. The functions of a technical staff in public utility regulation. *Proc., Indiana Sanitary and Water Supply Association*, 1913: 114-142.

On the work of the Wisconsin staff.

PENCE, W. D. Functions of a technical staff in the regulation of public utilities. *Engineering Record*, lxvii, 260-262 (1913).  
Abstract.

— The valuation and inspection work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Engineering News*, lxi, 227-229 (1909).

Abstract.

— Valuation by Wisconsin state engineers. *Public Service Regulation*, ii, 127-130 (1913).

An outline of the organization and work of the Wisconsin tax and railroad commissions.

— The work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Journal of the Western Society of Engineers*, xiv, 73-100 (1909).

Discussion: pp. 100-111. A full account of the organization and work of the engineering department.

— — — *Engineering Record*, lix, 10-12, 49-52, 73-75 (1909).

Reprint.

## THEORIES AND METHODS

ACHATZ, R. V. The determination of unit prices on material for purposes of valuation of plant. *Engineering and Contracting*, xli, 562-563 (1914).

Includes tables and charts; technical. A good discussion of various methods.

ALLISON, J. E. Ethical and economic elements in public service valuation. *Quarterly Journal of Economics*, xxvii, 27-49 (1912).

A very good discussion of all theories of valuation, the writer favoring original cost.

ALVORD, J. W. Fundamental principles of public utility valuation. *Trans., American Society of Civil Engineers*, lxxix, 117-165 (1915).

Discussion: pp. 166-237. An excellent statement of valuation fundamentals. The writer distinguishes between cost and value, and considers various theories of valuation at some length. Includes a list of important legal decisions.

ANDERSON, G. W. How to get rid of the reproduction cost theory. *Utilities Magazine*, i, no. 3, 28-36 (1916).  
An argument for the use of the actual cost theory, with citations. The writer believes that legislative rather than judicial control of rates is desirable.

BAUER, JOHN. Bases of valuation in the control of return on public utility investments. *American Economic Review*, vi, 568-588 (1916).  
On the need for a definite standard of valuation and the requirements of such a standard. Good, but somewhat academic.

— Valuation of public service properties: actual cost *vs.* cost of reproduction. *Political Science Quarterly*, xxx, 254-276 (1915).  
A somewhat academic general discussion, favoring original cost and the agency theory.

BEALE, J. H., and WYMAN, BRUCE. Basis of capital charges. (*In Railroad rate regulation*. 2d edition. New York, 1915.) 209-249.  
A good legal discussion of the various theories of valuation; thoroughly annotated.

BEMIS, E. W. Original cost as the chief basis for fair value. *Utilities Magazine*, i, no. 3, 36-42 (1916).  
A popular argument, with quotations from reports and decisions.

BETTMAN, ALFRED. Constitutionality of historical cost method of public utility valuation. *Utilities Magazine*, i, no. 3, 46-51 (1916).  
A good analysis, with many citations of decisions.

CLARK, J. M. Some neglected phases of rate regulation. *American Economic Review*, iv, 565-574 (1914).  
A somewhat academic, economic discussion of (1) fluctuating prices and the earnings of capital, (2) surplus accumulated out of earnings, and (3) betterments and public necessity.

CORY, C. L., VINCENT, W. G., JR., and NORTON, W. J. Symposium on inventories and appraisals of properties. *Trans., American Institute of Electrical Engineers*, xxxiv, 2023-2050 (1915).  
Part I, by C. L. Cory (pp. 2023-2030), gives a brief résumé of valuation theories.

DIX, J. F. "Partnerships" vs. "principal and agent" in public utility rate making. *Journal of Electricity, Power and Gas*, xxxi, 607-609 (1913).

DREYFUS, E. D. Reckoning with costs of superseded equipment. *Electrical World*, lxviii, 272-274 (1916).  
Gives reasons for allowing expenditures for abandoned equipment to remain in the capitalization. Includes charts and statements of the attitude of various commissions.

DUPONT, A. B. Fallacy of the "reproduction cost" theory in determining the value of property of public utilities. *Utilities Magazine*, i, no. 3, 25-27 (1916).  
Popular, with hypothetical illustrations.

ERICKSON, HALFORD. Original cost. *Utilities Magazine*, i, no. 3, 43-46 (1916).  
An excellent statement of what original cost means, differing somewhat from the usual view.

ESHLEMAN, J. M. A criticism of the reproduction theory of valuation. *Utilities Magazine*, i, no. 3, 5-12 (1916).  
A very good discussion.

FLOY, HENRY. Value for rate making. New York, 1916. 322 pp.  
Ch. iv. Fair value for rate making.  
v. Cost of reproduction.  
A very good discussion of valuation theories, with quotations from decisions. Opposes investment cost theory.

FOSTER, H. A. Value. (*In Engineering valuation of public utilities and factories*. New York, 1912.) 6-26.  
A good general summary of valuation theories, with quotations from articles and cases.

FRENCH, H. F. Reproduction value vs. fair value. *Utilities Magazine*, i, no. 3, 12-17 (1916).  
A somewhat popular argument against the use of reproduction cost as the sole criterion of value. The writer believes that judgment, with all valuation theories as guides, is the only just method.

GANDOLFO, J. H. The valuation of public utility property. *Trans., American Society of Civil Engineers*, lxxix, 842-878 (1915).  
Discussion: pp. 879-918. An excellent discussion, the writer advocating actual cost as the chief basis of valuation.

GILLETTE, H. P. Two conflicting theories of valuation of public service companies. *Engineering and Contracting*, xxxviii, 648-650 (1912).

The writer contends that valuation must be based on market value (competitive theory) or the amount of the investment (agency theory); not on a combination of the two.

— Two conflicting theories of valuation. *Railway Age Gazette*, liv, 55-56 (1913).

The same.

GRAHAM, D. A. The appraisal of waterworks properties, with special reference to the reproduction method. *Engineering and Contracting*, xxxix, 420-421 (1913). Elementary.

GRAY, J. H. Expert (or opinion) testimony in rate valuation cases: a study in the administration of justice. *Utilities Magazine*, i, no. 3, 192-204 (1916).

— The regulation of public service corporations: the vagaries of valuation. *American Economic Review*, supplement, iv, 18-68 (1914).

The writer advocates the agency theory and opposes reproduction cost as being unreal and based on estimate.

GRUHL, EDWIN. Recent tendencies in valuations for rate making purposes. *Annals of the American Academy of Political and Social Science*, liii, 219-237 (1914).

An excellent review of court and commission attitude, with many quotations from the cases. Summarizes the conclusions. Favors reproduction cost less physical depreciation.

HAYES, H. V. Public utilities: their cost new and depreciation.

New York, 1913. 262 pp.

Ch. ii. Replacement costs of physical property.

vi. Original cost.

vii. Commercial value.

xii. Fair present value: rates.

General discussions of the various valuation theories.

— Public utilities: their fair present value and return. New York, 1915. 207 pp.

Ch. ii. Ascertainment of fair present value.

iv. Replacement cost.

v. Actual original cost.

A somewhat elementary discussion of the various valuation theories.

JURGENSEN, D. F. Misapplication of interest, contingencies, and engineering items for valuing railroads by cost of replacement method. *Journal of the Association of Engineering Societies*, li, 95-101 (1913).

Discussion: pp. 237-239. A reply to criticism of his "Railroad valuation: reproduction cost new as a safe basis for rates." Considers chiefly the Northern Pacific valuation.

— Railroad valuation: reproduction cost new as a sole basis for rates. *Journal of the Association of Engineering Societies*, xlix, 204-214 (1912).

Discussion: i, 66-67 (1913). Refers to railroads only, but is of interest for other utilities because of expressing the views of the Minnesota railroad and warehouse commission.

— Wrong basis for rates. *Public Service Regulation*, i, 699-703 (1912).

A criticism of reproduction cost new, favoring "fair value."

KNOWLES, MORRIS. Relation of reproduction cost to fair value. *Utilities Magazine*, i, no. 3, 17-21 (1916).

The writer favors actual cost, but considers reproduction cost an excellent guide.

LEWIS, H. T. Interest and profits in rate regulation: the practice of the Wisconsin railroad commission. *Political Science Quarterly*, xxvii, 239-259 (1912).

A good analysis, with many quotations from cases before the commission.

MACK, E. S. Standards for rate regulation by commission. ?, 1908 ? 24 pp.

A general discussion of legal aspects of valuation and rate regulation, the writer favoring the actual cost theory; annotated.

METCALF, LEONARD. Lessening cost of valuation of public utilities. *Engineering News*, lxxv, 215 (1916).

Abstract. Interesting suggestions for reducing cost of valuations.

VINCENT, W. G., JR. Present value of public utility properties. *Journal of Electricity, Power and Gas*, xxxiii, 403-407 (1914).

An elementary account of how present value is determined; includes illustrative examples and one chart.

WHITTEN, R. H. Actual cost. *Utilities Magazine*, i, no. 3, 51-53 (1916).

A very good theoretical argument for the use of actual cost.

— Distinction between value for tax and rate purposes. *Proc., National Tax Association*, 1913: 342-350.

— Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase. New York, 1912-1914. 2 vols.

Ch. ii. Fair value for rate purposes.

iii. Market value as a standard for rate purposes.

iv. Cost of reproduction as a standard of value for rate purposes.

v. Actual cost as a standard of value for rate purposes.

xviii. Cost new *v.* cost less depreciation.

An excellent economic discussion of valuation theories, with very full quotations from court and commission cases.

WILGUS, W. J. Physical valuations of railroads. *Trans., American Society of Civil Engineers*, lxxvii, 203-224 (1914).

Discussion: pp. 225-345. A good, somewhat elementary discussion of valuation theories and problems. Treats of railroads only, but is of interest for all public utilities.

WILLIAMS, W. H. Valuation of public service corporations. Publications, American Economic Association, 3d series, xi, 196-238 (1910).

Cost of reproduction theory is considered somewhat theoretically on pp. 196-216, with numerous quotations from the cases.

### INVENTORIES

BADGER, H. R. Work of valuation of electric railway property. *Electric Traction Weekly*, vi, 197-199 (1910).

A good, brief analysis of the necessary organization and work.

BALLARD, F. W. Some essentials of appraisal work. *Utilities Magazine*, i, no. 3, 179-181 (1916).

BUTT, W. E. Bringing an old waterworks valuation up to date. *Engineering News*, lxx, 408-409 (1913).

Explanation of the use of index numbers to correct for changes in unit prices.

CARVER, H. E. Continuous inventories: their value and preparation. *Electric Railway Journal*, xlvi, 1053-1054 (1916).

CORY, C. L., VINCENT, W. G., JR., and NORTON, W. J. Symposium on inventories and appraisals of properties. *Trans., American Institute of Electrical Engineers*, xxxiv, 2023-2050 (1915).

Part II, by W. G. Vincent, Jr. (pp. 2031-2040), treats of the method of taking the inventory.

DICKERMAN, J. C. The determination of unit prices in appraisals for rate making. *Utilities Magazine*, i, no. 6, 23-25 (1916). A good discussion, with some reference to the practice of various commissions.

DREYFUS, E. D. Appraisement of small electric properties. *Electrical Review and Western Electrician*, lxvi, 433-438, 500-505 (1915).

An excellent discussion of the method of taking the inventory; with suggested forms, symbols and depreciation charts.

FLOY, HENRY. Cost of reproduction. (*In Value for rate making. New York, 1916.*) 100-131.

Includes a suggestive summary of the elements of reproduction cost (pp. 112-113) and instructions for making the inventory.

— Development expenses, intangible expenses, non-physical costs, overhead expenses. (*In Valuation of public utility properties. New York, 1912.*) 90-128.

Gives tables showing the classification used in the inventory in the Coney Island cases.

— Valuation of public utility properties. New York, 1912. 390 pp.

Ch. iv. Making an appraisal.

v. Structural costs.

An excellent outline of the work and methods to be used in making an appraisal. Includes charts of unit price fluctuations.

FORD, F. R. Valuation of intangible street railway property. *Annals of the American Academy of Political and Social Science*, xxxvii, 119-141 (1911).

Outlines the inventory needed.

FOSTER, H. A. Engineering valuation of public utilities and factories. New York, 1912. 345 pp.

Ch. iii. Directions for the valuation of tangible property.

iv. Instructions for valuation.

v. Forms for use in making a valuation.

These chapters form an excellent guide for the valuation engineer. Chapter iv consists of quotations from the instructions issued by Judge Savage in a Maine case. Chapter v includes a very large number of forms used by the Wisconsin tax and railroad commissions, with discussion.

**GILLETTE, H. P.** The valuation of waterworks properties.

I. Inventorying a waterworks plant. *Engineering and Contracting*, xlili, 394-395 (1915).

A good outline of the inventory and the work of making the appraisal.

**GLAESER, M. G.** The problem of unit prices in valuation. *Utilities Magazine*, i, no. 3, 161-165 (1916).

A good elementary analysis.

**HAYES, H. V.** Public utilities: their cost new and depreciation.

New York, 1913. 262 pp.

Ch. ii. Replacement costs of physical property.

      iii. Determination of replacement cost.

Includes some discussion of unit prices and inventory methods.

**HENRIQUES, J. C.** Power plant inventory. *Electric Railway Journal*, xlvii, 616-618 (1916).

Includes suggested forms.

**KUHN, G. W.** How to appraise public utility property. *Electric Railway Journal*, xlviili, 97-100, 315-319 (1916).

Includes suggested forms. A good and fairly detailed account.

**MEIGS, R. J.** Coöperation in making inventories. *Utilities Magazine*, i, no. 3, 181-182 (1916).

**MORSE, J. G.** Valuation by approximation. *Utilities Magazine*, i, no. 3, 183-187 (1916).

A very interesting and suggestive article advocating the use of methods similar to those of the fire insurance underwriters as being sufficiently accurate in connection with the inevitable assumptions.

**PENCE, W. D.** The functions of a technical staff in public utility regulation. *Proc., Indiana Sanitary and Water Supply Association*, 1913: 114-142.

Describes the work of the Wisconsin commission's technical staff and includes an outline of the inventory used and of the form of organization.

— Functions of a technical staff in the regulation of public utilities. *Engineering Record*, lxvii, 260-262 (1913).

Abstract.

PENCE, W. D. The valuation and inspection work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Engineering News*, lxi, 227-229 (1909).

Abstract.

— Valuation by Wisconsin state engineers. *Public Service Regulation*, ii, 127-130 (1913).

Abstract.

— Wisconsin service inspection and improvement. *Public Service Regulation*, ii, 167-171 (1913).

Abstract.

— The work of the joint engineering staff of the Wisconsin tax and railroad commissions. *Journal of the Western Society of Engineers*, xiv, 73-100 (1909).

Discussion: pp. 100-111. A full account of the organization and work of the engineering department.

— — — *Engineering Record*, lix, 10-12, 49-52, 73-75 (1909).

Reprint.

PILLSBURY, C. L. The making and maintenance of priced inventories of public utilities. *Utilities Magazine*, i, no. 3, 171-178 (1916).

Excellent; non-technical.

PRIEST, G. H. Some notes on the valuation of mains and services.

*American Gas Light Journal*, c, 266-267 (1914).

Discussion: pp. 267-268. Directions for making the appraisal.

RIGGS, H. E. The valuation of public service corporation property. *Trans., American Society of Civil Engineers*, lxxii, 1-173 (1911).

Discussion: pp. 174-300. Gives forms for inventories; rather technical.

SCHREIBER, MARTIN. The accuracy of appraisals. *Aera*, i, 247-251 (1912).

THOMPSON, R. A. Method used by the Railroad commission of Texas, under the stock and bond law, in valuing railroad properties. *Trans., American Society of Civil Engineers*, lii, 328-345 (1904).

Discussion: pp. 346-364. Technical; with illustrative forms and tables.

VAN AUKEN, C. L. Making a physical valuation of large terminals. *Railway Age Gazette*, lix, 127-129 (1915).  
Field and office suggestions, with illustrative forms. Treats of railroads only, but is of interest in connection with traction valuations.

WELLS, W. I. Elements affecting the fair valuation of plant and property. *Proc., National Electric Light Association*, 1911: i, 271-283.  
Discussion: pp. 283-289. A good analysis of valuation elements.

WHITTEN, R. H. Average price *v.* present price. (*In Valuation of public service corporations*. New York, 1912-1914.) i and ii, ch. xi.  
An excellent economic discussion of unit prices in valuation, with very full quotations from court and commission cases.

— Rules for appraisers in Maine condemnation cases. (*In Valuation of public service corporations*. New York, 1912-1914.) i, ch. xxxi.  
Quotations from the directions of Judge Savage.

WOOLFOLK, W. G. Appraisal of public utility properties. Indianapolis? 1915? 39 pp.  
Method of making the appraisal, with forms.

## INTANGIBLES

ABENDROTH, H. G. Overhead charges in valuation. *Aera*, iii, 354-364 (1914).  
An analysis of the elements; includes a table of percentages used in various appraisals.

— — — *Electric Railway Journal*, xlivi, 1434-1436 (1914).  
Abstract.

ALVORD, J. W. The financial questions in waterworks valuations. *Proc., American Waterworks Association*, xxii, 142-152 (1902).  
A brief discussion of intangible values, franchise value and rate of return.

— — — *Engineering Record*, xliv, 30-32 (1902).  
Abstract.

ALVORD, J. W. Notes on going value and methods for its computation. Proc., American Waterworks Association, xxix, 184-208 (1909).

Discussion: pp. 208-279. An excellent analysis, with many tables and charts.

For discussion of this article, see W. H. Bryan's "Going value as an element in the appraisal of public utility properties."

BAUER, JOHN. Going value in connection with a physical appraisal in a rate case: the New York rule. Political Science Quarterly, xxx, 463-475 (1915).

Going value: what it is, how it is to be calculated, and when it should be allowed under the rule in the King's County lighting case.

BRYAN, W. H. Going value as an element in the appraisal of public utility properties. Journal of the Association of Engineering Societies, xliii, 147-158 (1909).

Discussion: pp. 286-288. A very interesting discussion of intangible values as considered by the Wisconsin commission, and by J. W. Alvord in his "Notes on going value and methods for its computation."

— — — Journal of Electricity, Power and Gas, xxiv, 31-35 (1910).

Reprint.

BURNS, C. S. The valuation of public utilities. Public Service, xi, 117-118 (1911).

Brief discussion of going value.

COOLEY, M. E. Overhead charges. Proc., American Electric Railway Accountants' Association, 1911: 169-183.

Discussion: pp. 183-197; 1912: 37-44. A good, rather elementary discussion.

CORY, C. L., VINCENT, W. G., JR., and NORTON, W. J. Symposium on inventories and appraisals of properties. Trans., American Institute of Electrical Engineers, xxxiv, 2023-2050 (1915).

Part III, by W. J. Norton (pp. 2041-2050), discusses working capital.

ERICKSON, HALFORD. Principles of valuation of public utilities. Public Service Regulation, i, 294-300, 370-377 (1912).

Intangibles: pp. 370-377.

FLOY, HENRY. Cost of reproduction. (*In* Value for rate making. New York, 1916.) 100-131.  
 Includes some discussion of certain intangible elements with suggested percentages.

— Development expenses, intangible expenses, non-physical costs, overhead expenses. (*In* Valuation of public utility properties. New York, 1912.) 91-128.  
 A thorough, annotated study, with tables showing the inventory used in the Coney Island cases.

— Franchises, good will, going value, contracts. (*In* Valuation of public utility properties. New York, 1912.) 129-167.  
 A thorough study, with charts and tables, and many quotations from articles and court and commission decisions.

— Franchises, working capital and bond discounts. (*In* Value for rate making. New York, 1916.) 157-176.  
 Includes quotations from decisions.

— Value for rate making. New York, 1916. 322 pp.  
 Ch. vii. Franchises, working capital and bond discounts.  
 viii. Going value.  
 An excellent discussion, with quotations from court and commission decisions. Includes a table of working capital allowances by different courts and commissions (p. 171), and other tables and charts.

FORD, F. R. Valuation of intangible street railway property.  
*Annals of the American Academy of Political and Social Science*, xxxvii, 119-141 (1911).  
 Includes elaborate analyses of the intangible elements; outlines the inventory needed; and briefly reviews the treatment of intangibles in certain traction valuations.

FOSTER, H. A. Value of good will, going concern or going value. (*In* Engineering valuation of public utilities and factories. New York, 1912.) 133-146.  
 An analysis of intangible values, with quotations from articles and cases.

FOWLE, F. F. Going value. *Journal of the Western Society of Engineers*, xvii, 147-170 (1912).  
 Discussion: pp. 177-190. A very good review and discussion of various methods of determining going value.

— Going value of public utilities. *Electric Railway Journal*, xxxviii, 1115-1117 (1911).  
 Abstract.

FOWLE, F. F. What is going value? *Public Service Regulation*, i, 627-636 (1912).

Abstract.

Fox, A. M. Going value in purchase *vs.* rate cases. *Utilities Magazine*, i, no. 3, 152-154 (1916).

GARRISON, N. J. Intangible assets of public utilities. *Public Service*, xii, 105-107 (1912).

GILLETTE, H. P. The appraisal of "overhead costs." *Electrical World*, lxvi, 41-43 (1915).

— The appraisal of water power rights. *Engineering and Contracting*, xxxviii, 624-628 (1912).

A discussion of the various theories.

— Development cost or "going value" of public service companies. *Engineering and Contracting*, xxxvii, 708-712 (1912).

Abstract of a report by Mr. Gillette, interesting because of a discussion of intangible values.

(An abstract of another portion of the report is published in xxxvii, 429-432.)

— Non-physical or going concern values. *Annals of the American Academy of Political and Social Science*, liii, 214-218 (1914).

Brief, elementary outline of the elements of intangible value.

— Valuations of public service properties. *Public Service*, x, 114-116 (1911).

Emphasizes the importance of development expense in determining the fair rate of return.

— The valuation of waterworks properties. III. The appraisal of "overhead costs." *Engineering and Contracting*, xliv, 14-18 (1915).

A good, thorough discussion.

— — V. Appraisal of water right values. *Engineering and Contracting*, xliv, 157-158 (1915).

A good general discussion.

GILLETTE, H. P. The valuation of waterworks properties. VI.  
Appraisal of development cost or going value and franchise  
value. *Engineering and Contracting*, xliv, 258-261 (1915).  
A long analysis, with illustrative tables of value by different methods.

— — —. VII. Appraisal of working capital. *Engineering  
and Contracting*, xliv, 356 (1915).

HAGENAH, W. J. Intangible values of electric railways and their  
determination. *Public Service*, xiii, 213-214, 223-225 (1912).  
Abstract.

— — — Intangible values of electric railways and their determina-  
tion from accounts. *Proc., American Electric Railway  
Accountants' Association*, 1912: 60-74.  
A rather general discussion, the writer maintaining that the determi-  
nation of intangible values is mainly an accounting problem.

— — — *Electric Railway Journal*, xl, 698-701 (1912).  
Abstract.

Harvard Law Review — Notes. The problem of going value.  
*Harvard Law Review*, xxvii, 744-745 (1914).  
An excellent summary of court decisions, with many citations.

HAYES, H. V. Going value. (*In Public utilities: their fair  
present value and return*. New York, 1915.) 131-158.  
A good non-technical discussion.

— — — Public utilities: their cost new and depreciation. New  
York, 1913. 262 pp.  
Ch. iii. Determination of replacement cost.  
    iv. Value as going concern.  
    v. Value of good will and franchises.  
A discussion of intangibles, with some quotations from decisions.

HEILMAN, R. E. Some economic aspects of waterworks valua-  
tion. *Journal of the American Waterworks Association*, ii,  
538-543 (1915).  
A brief discussion of the attitude of various commissions towards going  
value.

KEALY, P. J. Overhead charges in valuation work. *Proc., Ameri-  
can Electric Railway Association*, 1916: 172-190.  
A very thorough study, giving a good analysis of the various elements.

KEALY, P. J. Overhead charges in valuation work. *Electric Railway Journal*, xlviii, 762-767 (1916).  
Abstract.

— Part played by overhead charges in determining valuations. *Public Service*, xxi, 139-140 (1916).  
Abstract.

KNOWLES, MORRIS. Determination of going value. *Public Service*, xiii, 175-177 (1912).  
A brief description of the various methods; with one chart.

LAWTON, W. H. Depreciation, intangible values and rates. *Journal of Accountancy*, xvii, 325-354 (1914).  
An excellent article including an analysis of the intangible elements.

MARKS, W. D. Practical rate making and appraisement. South Hadley, 1914 ? 269 pp.  
Overhead charges: pp. 159-162.  
Present value of prospective profits; "good will"; "development expense"; "going value"; "intangible values"; options.  
A very brief general discussion of intangibles.

METCALF, LEONARD, and ALVORD, J. W. The going value of waterworks. *Trans., American Society of Civil Engineers*, lxxiii, 326-355 (1911).  
Discussion: pp. 356-391. Thorough treatment of the subject. Includes tables and charts.

NASH, L. R. Recent developments in public service regulation. *Stone and Webster Public Service Journal*, xv, 132-134 (1914).  
Very brief account of current decisions as to intangibles.

PAINES, F. B. H. Preliminary and indirect costs: sometimes called overheads. *Stone and Webster Journal*, xix, 186-207 (1916).  
An outline and discussion; elementary and rather popular.

ROSECRANTZ, C. M. Other elements of value. *Proc., American Electric Railway Association*, 1913: 136-152.  
A good analysis and historical account of intangibles in valuations for different purposes, with many quotations from court decisions.

ROYCE, F. P. The going concern value in public service corporations. *Stone and Webster Public Service Journal*, xiv, 89-96 (1914).

ROYCE, F. P. The going concern value in public service corporations. *Aera*, ii, 475-490 (1913).  
Reprint.

SHAAD, G. C. Intangible values and their relation to the valuation of public utilities. *Electrical Review and Western Electrician*, lxiv, 26-28 (1914).  
An elementary analysis.

STORER, S. B. The relation of load factor to the valuation of hydroelectric plants. *Trans., American Institute of Electrical Engineers*, xxv, 139-143 (1906).  
Semi-technical, with charts. The writer states that the value of a hydroelectric plant is due primarily to its earnings.

THORNE, CLIFFORD. Going value as an element of fair value. *Utilities Magazine*, i, no. 3, 138-152 (1916).  
An excellent analysis, including a review of commission decisions.

TINGLEY, R. H. Overhead charges in valuation. *Railway Age Gazette*, lviii, 1247-1248 (1915).  
A very brief discussion of the meaning of overhead and of commission attitude.

WHITTEN, R. H. Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase. New York, 1912-1914. 2 vols.  
Ch. viii. Property donated or acquired without cost.  
ix. Property constructed out of surplus.  
x. Unused property.  
xii. Overhead charges.  
xiii. Discount on bonds.  
xiv. Working capital.  
xv. Piecemeal construction.  
xvi. Adaptation and solidification.  
xxi. Going concern in purchase cases.  
xxii. Going concern in rate cases.  
xxiii. Going concern as the value of a created income.  
xxiv. Going value rule of Wisconsin railroad commission.  
xxv. The theory of going concern value.  
Very excellent chapters on the different elements of intangible values. Economic and theoretical discussion, together with very full quotations from all important court and commission cases.

WYER, S. S. Going value and going concern value. (*In Regulation, valuation and depreciation of public utilities*. Columbus, 1913.) 176-183.  
Composed largely of classified quotations from books, articles, and cases.  
A good, semi-technical analysis; includes charts.

## FRANCHISE VALUE

ALVORD, J. W. The financial questions in waterworks valuations. Proc., American Waterworks Association, xxii, 142-152 (1902). A brief discussion of intangible values, franchise value and rate of return.

— Engineering Record, xliv, 30-32 (1902). Abstract.

BALDWIN, H. DEF. Determining franchise values. Utilities Magazine, i, no. 3, 67-71 (1916).

— On the valuation of waterworks' special franchises. Proc., American Waterworks Association, xxxiii, 9-43 (1913). Discussion: pp. 43-47. The writer regards franchise value as based on a return above "fair return."

BETTMAN, ALFRED. Theory of franchise values. Utilities Magazine, i, no. 3, 74-76 (1916). An interesting discussion.

FLOY, HENRY. The engineer's activity in public affairs: public utility commissions and franchise valuation. Trans., American Institute of Electrical Engineers, xxvii, 335-353 (1908). Discussion: pp. 354-372.

— Franchises, good will, going value, contracts. (*In Valuation of public utility properties.* New York, 1912.) 129-167. A thorough study, with charts and tables, and many quotations from articles and court and commission decisions.

— Franchises, working capital and bond discounts. (*In Value for rate making.* New York, 1916.) 157-176. Franchise value: pp. 157-165. Includes quotations from decisions.

FOSTER, H. A. Franchise. (*In Engineering valuation of public utilities and factories.* New York, 1912.) 236-251. A good discussion of franchises and their terms, franchise valuation and taxation, with many quotations from court and commission decisions.

Harvard Law Review — Notes. Valuation of public service franchises. Harvard Law Review, xxviii, 501-505 (1915). An excellent summary of court decisions, with many citations.

HAYES, H. V. Values of good will and franchises. (*In* Public utilities: their cost new and depreciation. New York, 1913.) 94-101.  
Includes a very brief discussion of franchise value.

HODGE, W. H. Concerning franchise values. *Public Service*, v, 111-112 (1908).

MCLAIN, C. A. Some distinctions between the legal and administrative phases of franchise valuation. *Utilities Magazine*, i, no. 3, 72-74 (1916).  
A good analysis.

MARKS, W. D. Franchise value. (*In* Practical rate making and appraisement. South Hadley, 1914 ?) 184-186.

WHERRY, W. M., JR. Franchise values. Proc., American Electric Railway Association, 1913: 124-135.  
A good historical treatment of the difference between cost and value of franchise; with quotations from court decisions.

— — — Electric Railway Journal, xlvi, 781-782 (1913).  
Abstract.

— — — Franchise values considered. *Aera*, ii, 463-474 (1913).  
Reprint.

WHITTEN, R. H. Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase. New York, 1912-1914. 2 vols.  
Ch. xxvi. Franchise value in purchase cases.  
xxvii. Franchise value in rate cases.  
xxviii. Appraisal of franchise value.  
xxix. The theory of franchise value.  
Very excellent economic discussion of franchise value, with very full quotations from court and commission cases.

WILCOX, D. F. Principles as to franchise values. *Utilities Magazine*, i, no. 3, 59-67 (1916).  
A good elementary discussion of franchise values for taxation, rate making, condemnation, sale and capitalization.

## LAND VALUE

BEMIS, E. W. Treatment of land in rate cases. *National Municipal Review*, iii, 741-745 (1914).

DOTY, E. T. The measurement of land values. *Utilities Magazine*, i, no. 3, 85-87 (1916).  
Elementary outline of methods used; with diagrams.

FLOY, HENRY. Land, paving and water rights. (*In* Value for rate making. New York, 1916.) 132-156.  
An excellent discussion, with quotations from decisions.

— Structural costs. (*In* Valuation of public utility properties. New York, 1912.) 62-90.  
Includes an interesting discussion of real estate valuation, with tables and quotations from articles and decisions.

GILLETTE, H. P. The valuation of waterworks properties. IV. Appraisal of reservoir site value. *Engineering and Contracting*, xliv, 80-81 (1915).

HAYES, H. V. Determination of replacement cost. (*In* Public utilities: their cost new and depreciation. New York, 1913.) 35-68.  
Includes a brief discussion of land values (pp. 61-68).

— Principles to be applied in valuing land. *Utilities Magazine*, i, no. 3, 77-84 (1916).  
An excellent elementary statement of principles.

HELM, A. E. Principles to be applied in valuation of lands used for the purpose of a common carrier. *Utilities Magazine*, i, no. 3, 88-91 (1916).  
Opposes the allowance of unearned increment; includes brief summaries of court decisions.

MALTBIE, M. R. The proper treatment of appreciation of land. *Utilities Magazine*, i, no. 3, 96-97 (1916).  
The writer believes that appreciation should be treated as income to offset depreciation.

O'BRIEN, T. D. Land values under the Minnesota rate case. *Utilities Magazine*, i, no. 3, 84-85 (1916).

STEVENS, F. W. Discussion of principles to be applied in valuing land. *Utilities Magazine*, i, no. 3, 92-96 (1916).

Popular discussion with references to court attitude.

— The valuation of railroad right of way. ?, 1914. 3 pamphlets.

Discusses principles as applied to railroads only, but is of some interest for other utilities, especially street railways. Many quotations from the cases.

WHITTEN, R. H. *Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase*. New York, 1912-1914. 2 vols.

Ch. vi. Valuation of land.

vii. Pavement over mains.

viii. Property donated or acquired without cost.

An excellent economic discussion of land valuation, with very full quotations from court and commission cases.

## DEPRECIATION

ALLISON, J. E. A criticism of theoretical depreciation. *Utilities Magazine*, i, no. 3, 124-126 (1916).

— Depreciation. *Annals of the American Academy of Political and Social Science*, liii, 198-213 (1914).

Condensed from "Should public service properties be depreciated to obtain fair value in rate or regulation cases"; with charts.

— Finding fair value. *Public Service Regulation*, i, 716-721 (1912).

Abstract.

— Should public service properties be depreciated to obtain fair value in rate or regulation cases? St. Louis, 1912. 50 pp.

Report to the St. Louis public service commission.

Gives methods of computation, with charts and theoretical discussion.

Non-technical. Opposes depreciation deductions in valuations for rate making.

ALVORD, J. W. Depreciation. *Proc., American Waterworks Association*, xxiii, 473-502 (1903).

Discussion: pp. 502-511. An analysis of the probable life of various classes of waterworks equipment, with tables, charts and formulae; semi-technical.

**ALVORD, J. W.** The depreciation of public utility properties as affecting their valuation and fair return. *Trans., American Society of Civil Engineers*, lxxvii, 788-803 (1914).

Discussion: pp. 804-889. An excellent, semi-technical discussion of depreciation theories and methods.

**American Waterworks Association.** A discussion of depreciation and a comparison of rates and bookkeeping methods of municipally and privately owned waterworks. *Proc., American Waterworks Association*, xxxiii, 325-327 (1912).

Brief comments by many different men.

**ARMSTRONG, C. H.** Depreciation and kindred matters. *Journal of Gas Lighting, Water Supply and Sanitary Improvement*, cii, 223-225 (1908).

On the accountancy of depreciation, with illustrative examples.

**ATKINSON, A. S.** Construction and depreciation. *Electric Traction Weekly*, v, 919-921 (1909).

Refers to street railways.

**BARKER, HARRY.** Side lights on depreciation problems of utilities. *Engineering News*, lxxvi, 1167-1169, 1212-1215 (1916).

On depreciation in rate making. Includes definitions, methods of computation, accountancy and discussion.

**BAUER, JOHN.** Depreciation and rate control: a question of justice. *Quarterly Journal of Economics*, xxix, 651-659 (1915).

See Young, A. A. Depreciation and rate control.

— Depreciation formula of the American society of civil engineers. *Journal of Accountancy*, xx, 104-111 (1915).

Technical.

**BISSELL, G. W.** The depreciation of electrical properties. *Electrical Age*, xxxvi, 459-461 (1906).

General discussion, with tables of percentage depreciation of plant and equipment.

**BONBRIGHT, J. C.** Depreciation and rate control: a further discussion. *Quarterly Journal of Economics*, xxx, 546-558 (1916).

See Young, A. A. Depreciation and rate control.

BOOTH, W. H. Sinking fund charges. *Tramway and Railway World*, xiii, 349-353 (1903).  
On the accountancy of depreciation and renewals.

BRYAN, W. H. The appraisal and depreciation of waterworks and similar properties. *Journal of the Association of Engineering Societies*, xxxix, 336-366 (1907).  
Discussion: pp. 367-381. A very good, concise summary of valuation theories and kinds of depreciation, with discussion. Includes charts and a table of estimated life and depreciation of machinery and plant (pp. 362-365).

BURNS, C. S. Valuation of public utilities. *Municipal Journal and Engineer*, xxix, 744-746 (1910).  
A technical article on the derivation of depreciation formulae.

CHASE, H. S. Depreciation in waterworks accounts: with reference to uniform reports. *Journal of the New England Waterworks Association*, xxiv, 305-313 (1910).  
Discussion: pp. 313-331.

— Maintenance and depreciation charges in accounts of public service corporations. *Journal of Accountancy*, iv, 1-9 (1907).  
On the need for proper and uniform accounts as the basis for comparisons of municipal and private ownership.

CHILD, R. W. Where a theory fails. *Stone and Webster Public Service Journal*, viii, 422-426 (1911).  
A brief attempt to apply the common sense test to depreciation.

CLAFLIN, G. E. Depreciation accounting for small companies. *Proc., National Electric Light Association*, 1909: vol. iii, 165-175.  
Discussion: pp. 175-182. On the methods of accounting for depreciation in large and small companies, and their differences.

CRAVATH, J. R. Accounting for depreciation. *Electrical World*, lxv, 213-215 (1915).

CRAVENS, G. W. The depreciation and maintenance of electrical equipment. *Electrical Review and Western Electrician*, lvi, 853-856 (1910).  
A technical discussion of the accountancy of depreciation; with formulae.

DAVIES, H. G. Fair interest on investment in public utilities.  
Electric Railway Journal, xliv, 1287-1289 (1914).  
Answer to J. B. Geijsbeek, "Fair return to public utilities."  
For a more extended discussion, see article with same title in *Journal of Accountancy*.

— — — Journal of Accountancy, xix, 34-45 (1915).  
Answer to J. B. Geijsbeek, "Fair return to public utilites."  
With tables and illustrative examples.

DAVIS, J. S. Depreciation and rate control: a criticism. Quarterly Journal of Economics, xxix, 362-378, 388-395 (1915). See Young, A. A., "Depreciation and rate control."

DELANO, F. A. The application of a depreciation charge in railway accounting. Journal of Political Economy, xvi, 585-601 (1908).  
A technical discussion, illustrated with charts, opposing the Interstate commerce commission's depreciation charge order. Of some interest for all public utilities.

DREYFUS, E. D. Appraisement of small electric properties. Electrical Review and Western Electrician, lxvi, 433-438, 500-505 (1915).  
An excellent discussion of the method of taking the inventory; with suggested forms, symbols and depreciation charts.

DUFFY, C. N. Depreciation. Electric Railway Review, xix, 83-84 (1908).  
An analysis of kinds of depreciation.

EDWARDS, H. M. Accounting for depreciation. Proc., National Electric Light Association, 1911: vol. ii, 179-186.  
Discussion: pp. 186-199. Semi-technical.

ERICKSON, HALFORD. As to depreciation accounting. Public Service Regulation, iii, 305-307 (1914).

— Depreciation. Proc., Central States Waterworks Association, 1912: 60-89.  
Discussion: pp. 90-97. Discusses all phases of the question; with tables of data illustrating different methods.

— — — Madison, Wisconsin, 1912. 43 pp.  
Reprint.

— Depreciation accounting. American Gas Light Journal, ci, 81-85 (1914).  
A technical article on the accountancy of depreciation, with tables and illustrative examples.

ERICKSON, HALFORD. Depreciation and its relation to the fair value. *Utilities Magazine*, i, no. 3, 112-124 (1916). An excellent discussion, with illustrative examples and tables.

— Depreciation problems. *Proc., American Gas Institute*, ix, 1582-1638 (1914). Discussion: pp. 1638-1682. On the financing and accounting of depreciation, with elaborate illustrative examples and tables.

— Methods of determining life of public utilities. *Engineering and Contracting*, xxxviii, 448-450 (1912). Abstract of paper before Central states waterworks association. Treats chiefly of methods of estimating life of equipment used by the Wisconsin commission.

— Methods of providing for and recording depreciation. *Engineering and Contracting*, xxxviii, 506-511 (1912). A technical discussion of the accountancy of depreciation of the Wisconsin commission; with tables. A continuation of the abstract entitled "Methods of determining life of public utilities."

— Some facts relating to depreciation and rate making. *Electrical Review and Western Electrician*, lxiv, 234-238 (1914).

— Some problems of public utility accounting. *Electric Railway Journal*, xliii, 306-307 (1914). On the need of more explicit directions from public service commissions concerning the accountancy of depreciation.

— Wisconsin method of depreciation accounting. *Gas Age*, xxxiv, 113-117 (1914).

FERNIE, F. The depreciation of underground cables. *Electrical Review (London)*, lx, 577-579 (1907). A highly technical study, with illustrative examples; theoretical.

— The obsolescence of electric lighting plant. *Electrical Review (London)*, lxiii, 516-517 (1908). Technical discussion, with charts.

FITTING, R. U. Depreciation. *Electric Railway Journal*, xliv, 558-562 (1914). An analysis of the kinds of depreciation and a study of the methods of computation; technical, with formulae and illustrative examples.

FLOY, HENRY. Depreciation. (*In* Valuation of public utility properties. New York, 1912.) 168-217.  
A detailed study, with tables and charts; technical.

— — — (*In* Value for rate making. New York, 1916.) 235-310.  
An excellent, thorough analysis and discussion of the different theories and methods, with many quotations from court and commission decisions. Includes many tables and charts; semi-technical.

— — — Depreciation as related to electrical properties. Trans., American Institute of Electrical Engineers, xxx, 1267-1309 (1911).  
An excellent study of depreciation theories and methods, in valuations and rate making. Includes extended definition of terms, analysis of elements, and a table of "approved rates used in estimating theoretical depreciation" for various classes of equipment, giving name of authority for each (pp. 1287-1291).  
For a criticism, see H. G. D. Nutting, "Depreciation."

— — — Electric Railway Journal, xxxviii, 21-24 (1911).  
Abstract.

FORD, F. R. The treatment of depreciation. Electric Railway Journal, xxxv, 284-287 (1910).  
Abstract of his "The theory of street railway rate regulation as developed in the Coney Island fare case."

— — — Public Service, viii, 77-80 (1910).  
Abstract.

— — — Treatment of depreciation of street railway properties. Engineering-Contracting, xxxiii, 560-562 (1910).  
Abstract.

FORSE, W. H., JR. Sinking funds. Proc., American Electric Railway Accountants' Association, 1913: 274-278.  
Discussion: pp. 279-294. Of accounting interest only.

— — — Aera, ii, 409-413 (1913).  
Reprint.

FOSTER, H. A. Depreciation. (*In* Engineering valuation of public utilities and factories. New York, 1912.) 147-218.  
An excellent, thorough discussion, including quotations from articles and decisions, formulae and many tables.

FOSTER, H. A. Handling of depreciation funds. (*In Engineering valuation of public utilities and factories.* New York, 1912.) 226-234.

On the accountancy of depreciation. Consists largely of quotations from articles and decisions.

FOWLE, F. F. A practical discussion of depreciation. *Southern Electrician*, xlii, 227-229 (1911).

GEIJSBEEK, J. B. Fair return to public utilities. *Journal of Accountancy*, xvii, 245-263 (1914).

A detailed analysis, attempting to prove the 50 per cent value theory; with charts and illustrative examples. For a criticism, see H. J. Davies, "Fair interest on investment in public utilities."

GILLETTE, H. P. A rational method of calculating depreciated value. *Engineering and Contracting*, xliv, 24-27 (1915). Discusses the defects in two common depreciation formulae, and deduces a new formula. Technical.

— The use of depreciation data in rate making and appraisal problems. *Electrical World*, lx, 927-931 (1912).

A good semi-technical study of depreciation theories and accountancy; with formulae.

— — — *Engineering and Contracting*, xxxviii, 476-480 (1912). The same.

— The valuation of waterworks properties. II. Estimating accrued depreciation: inspection and tests *vs.* life formulas. *Engineering and Contracting*, xlivi, 486-488 (1915). A discussion of average life and depreciation formulae; technical.

GRANT, H. D. Depreciation and reserve accounts. *Journal of Accountancy*, ix, 352-357 (1910). Of accounting interest only.

GRAY, H. L. The necessity of depreciation reserves. *Railway Age Gazette*, xlviii, 1297-1298 (1910). Elementary.

GRUHL, EDWIN. Depreciation estimates. *Aera*, i, 644-653 (1913). A good article on the necessity of actual data as to variation of life; with charts of the depreciation of various kinds of equipment.

**GRUNSKY, C. E.** The appraisal of public service properties as a basis for the regulation of rates. *Trans., American Society of Civil Engineers*, lxxv, 770-843 (1912).

Discussion: pp. 844-876. A long technical paper, including formulae, tables and charts. The writer attempts to prove that depreciation should not be deducted in valuations and that it should be included in rates.

— Depreciation as an element for consideration in the appraisal of public service properties. *Trans., American Society of Civil Engineers*, lxxix, 727-779 (1915).

A thorough discussion of various theories and methods, with charts and illustrative examples. The writer opposes depreciation deduction in valuations for rate making.

**HAMMOND, ROBERT.** Depreciation. *Journal of the Institution of Electrical Engineers*, xxxix, 270-280 (1907).

Discussion: pp. 280-301. Considers theory and methods; semi-technical.

**HANEY, L. H.** Depreciation and valuation for rate making. *Journal of Accountancy*, xix, 344-355 (1915).

A discussion of fundamental principles and popular misconceptions in the question of depreciation deduction.

**HARSHMAN, C. C.** Obsolescence in appraisals for rate making. *Engineering News*, lxxvi, 842-843 (1916).

**HASELMANN.** Depreciation as applicable to electric railways. *Street Railway Journal*, xxviii, 1003-1006 (1906).

On the methods of depreciation accounting in Europe, with tables.

**HAYES, H. V.** Depreciation. (*In Public utilities: their fair present value and return*. New York, 1915.) 159-204.

A good, non-technical discussion of the various theories and methods, with illustrative examples and tables.

— Public utilities: their cost new and depreciation. New York, 1913. 262 pp.

Ch. ix. Reserves for depreciation.

x. Life of plant.

xi. Depreciation.

A good, non-technical discussion of the various theories and methods, with illustrative examples and tables.

**HIXSON, L. T.** More about sinking funds: not a deduction from income. *Aera*, ii, 723-725 (1914).

Discussion of W. H. Forse, "Sinking funds."

HOLMES, F. L. Depreciation. (*In Regulation of railroads and public utilities in Wisconsin.* New York, 1915.) 79-95.  
A good, elementary discussion of the various theories and methods, with reference to the practice of the Wisconsin commission. Includes tables; non-technical.

HOW, JARED. Depreciation as an element in rate making. *Journal of Electricity, Power and Gas*, xxxvi, 184-185 (1916).  
Opposes the deduction of theoretical depreciation.

HUMPHREYS, A. C. Depreciation. *Proc., American Gas Institute*, ii, 307-353 (1907).  
Discussion: pp. 356-370. Supplementary to his paper before New England association of gas engineers entitled "The present and growing need for the general adoption of a uniform system of records and accounts."

Notes on the accountancy of depreciation, with comments and criticism of certain expert testimony and writings.

— — — Progressive Age, xxv, 688-696 (1907).  
Abstract.

— — — Depreciation: estimated and actual. *Proc., American Gas Institute*, viii, part II, 505-530 (1913).  
Reprinted from *Trans., Institution of Gas Engineers*.  
A long and very general discussion.

— — — Engineering and Contracting, xl, 394-399 (1913).  
Abstract.

— — — Journal of Gas Lighting and Water Supply, cxxii, 991-997 (1913).  
Abstract.

— — — Public Service, xv, 127-128, 163-164, 169-170 (1913).  
Abstract.

— — — Public Service Regulation, ii, 430-436 (1913).  
Abstract.

— — — In rate fixing by commission, should "depreciation" be deducted from plant valuation. *Proc., American Gas Institute*, ix, 1557-1582 (1914).  
Discussion: pp. 1638-1682. A general discussion, including comments on some of the literature of the subject and on decisions; with illustrative examples.

HURD, E. C. Should depreciation apply? *Public Service Regulation*, ii, 401-402 (1913).

JACKSON, W. B. Depreciation and reserve funds of electrical properties. *Journal of the Western Society of Engineers*, xv, 587-596 (1910).  
 Discussion: pp. 596-619. Semi-technical.

— Depreciation of electrical properties. *Public Service*, viii, 167-171 (1910).  
 Abstract.

— The depreciation problem. *Annals of the American Academy of Political and Social Science*, xxxvii, 31-42 (1911).  
 Non-technical discussion of electric railway depreciation and its accountancy.

— A discussion of the depreciation problem with particular reference to electric railways. *Engineering-Contracting*, xxxv, 176-178 (1911).

JAMES, C. C. Depreciation and value of public utilities. *Journal of Accountancy*, xxii, 409-416 (1916).  
 On the accountancy of depreciation.

JENKINS, J. B. Some of the absurdities of the straight line method of determining depreciation. *Railway Age Gazette*, lx, 357-358 (1916).  
 Technical, with illustrative tables.

JOHNSON, GEORGE. Depreciation. *Electrical Review* (London), lxvi, 1048-1050 (1910).  
 On the accountancy of depreciation; technical.

KEALY, P. J. A discussion of depreciation. *Engineering and Contracting*, xliv, 118-123 (1915).  
 Discusses various theories. Technical, with many illustrative charts and tables.

KLOTZ, R. G. Pick rational plant units for depreciation accounting. *Engineering News*, lxxv, 23-24 (1916).

LAWTON, W. H. Depreciation accounts. *Electrical World*, lxv, 1678-1679 (1915).  
 — Depreciation, intangible values and rates. *Journal of Accountancy*, xvii, 325-354 (1914).  
 An excellent article including an analysis of the commissions' depreciation requirements.

LAWTON, W. H. Sinking funds in rate valuations. *Journal of Accountancy*, xix, 191-197 (1915).  
Somewhat elementary.

— — — Gas Age, xxxv, 493-494 (1915).  
Reprint.

LEAKE, P. D. Depreciation: a plea for the study and use of better methods. *Mechanical Engineering*, xx, 117-121, 147-149, 179-182 (1907).  
On the accountancy of depreciation. Discusses various methods; with tables.

MACK, E. S. Depreciation. *Public Service*, vii, 42-45 (1909).

MACRAE, T. B. More about sinking funds: not a charge against profits. *Aera*, ii, 719-723 (1914).  
Discussion of W. H. Forse, "Sinking funds."

MARKS, W. D. Depreciation. (*In* Practical rate making and appraisement. South Hadley, 1914 ?) 163-177.

MAY, G. O. The problem of depreciation. *Journal of Accountancy*, xix, 1-13 (1915).  
An analysis of the kinds and causes of depreciation.

METCALF, LEONARD. Depreciation in waterworks operation. *Public Service*, x, 82-84, 119-121 (1911).  
On the importance of fixing rates high enough to include depreciation.

— — — Depreciation: in waterworks operation and accounting. *Journal of the New England Waterworks Association*, xxiv, 442-462 (1910).  
Discussion: pp. 463-472.

NASH, L. R. Depreciation reserves as affected by property growth. *American Economic Review*, vi, 69-89 (1916).  
Technical; with formulae, charts and tables.

— — — Stone and Webster Journal, xviii, 286-306 (1916).  
Reprint.

NEAL, J. H. Where maintenance ends and depreciation begins. *Proc., American Street and Interurban Railway Accountants' Association*, 1907: 195-200.  
Discussion: pp. 200-202. Chiefly of accounting interest; with tables.

**NEALE, R. E.** Depreciation in engineering works. *Mechanical World*, liii, 67-69, 90-91, 114-115 (1913).  
A highly technical study of elements and theories of depreciation, with tables, formulae and charts.

**NEELY, F. H.** Depreciation of power plant equipment. *Power and the Engineer*, xxx, 1028-1029 (1909).

**NUTTING, H. G. D.** Depreciation. *Electrical World*, lviii, 323-324 (1911).  
A criticism of Henry Floy's "Depreciation as related to electrical properties."

**PFEIFFER, A. J. J.** Tramway depreciation. *Tramway and Railway World*, xxviii, 93-96 (1910).  
A technical study of depreciation accountancy, with tables and charts; English.

**POMEROY, L. R.** Depreciation or valuation of properties. *Railway Age Gazette*, lv, 274-275 (1913).  
Technical, with charts and calculations.

**PROSSER, R. W.** Depreciation in gas plants. *American Gas Light Journal*, lxxvi, 767-768 (1902).  
The accountancy of depreciation; technical, with formulae and tables.

**RANDOLPH, L. S.** The ethics of allowance for depreciation. *Engineering Magazine*, xxxix, 692-696 (1910).  
A discussion of the various methods of allowing for depreciation in rates, and their results.

**RIFENBERICK, R. B.** Some illogical theories discussed: the wrong use of the element of depreciation in valuations to control rates. *Aera*, i, 1038-1045 (1913).

**ROBB, RUSSELL.** A problem in the making of rates. *Stone and Webster Public Service Journal*, xvi, 245-250 (1915).  
On the inadvisability of reducing rates where a depreciation fund has not been accumulated in the past; with illustrative examples.

**ROYSE, DANIEL.** Depreciation in electric railway accounting. *Street Railway Journal*, xxxi, 687-691 (1908).

**SALIERS, E. A.** Caring for depreciation. *Journal of Accountancy*, xiii, 241-250 (1912).  
Technical, with formulae.

— Depreciation in theory and practice. Chicago, 1916. 27 pp.  
Largely limited to accounting treatment.

SALIERS, E. A. Depreciation in valuations. *Journal of Accountancy*, xv, 106-116 (1913).  
On depreciation in relation to the various valuation theories; with some citations of decisions.

— Principles of depreciation. New York, 1915. 200 pp.  
An elementary textbook, of little interest except for accountants.

SEALY, ROBERT. The accounting treatment of depreciation.  
Proc., American Electric Railway Accountants' Association, 1914: 145-162.  
Discussion: 163-171. Technical; includes many citations.

SHAAD, G. C. Determination of depreciation. *Public Service*, xv, 17-18 (1913).  
A brief, elementary review of depreciation theories.

SMITH, C. A. Depreciation and sinking fund. *Electric Railway Journal*, xl, 122-123 (1912).  
Abstract.  
— — — *Canadian Engineer*, xxiii, 299-300 (1912).  
Abstract.

STEARNs, F. P. Depreciation defined. *Utilities Magazine*, i, no. 3, 100-101 (1916).

TEICHMANN, MAX. Depreciation. *Journal of Accountancy*, iii, 101-105 (1906).

THOMAS, J. J. Depreciation and valuation. *Journal of Accountancy*, xxi, 24-33 (1916).  
A short analysis, from the accountant's standpoint, of valuation theories and the depreciation problem.

WALLIS, R. N. Accounting of depreciation by electric railways.  
*Journal of Accountancy*, iv, 10-15 (1907).  
— Depreciation as applicable to electric railways. Proc., American Street and Interurban Railway Accountants' Association, 1906: 168-173.  
Discussion: pp. 173-218.

WESTERN, R. W. Calculating depreciation. *Tramway and Railway World*, xxiii, 456 (1908).  
Technical, with formulae.

WHITNEY, L. N. "Present value" misleading. *Public Service Regulation*, iii, 346-348 (1914).

The writer believes that the term "present value" is undesirable; discusses depreciation reserves.

WHITTEN, R. H. Depreciation and public service regulation. *Engineering News*, lxix, 942-947 (1913).

An elaboration of suggestions made in his "Valuation of public service corporations." An excellent comparison of four depreciation theories, the uniform investment method being advocated. Includes tables and a chart.

— Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase. New York, 1912-1914. 2 vols.

Ch. xvii. Physical depreciation.

xviii. Cost new *v.* cost less depreciation.

xix. Functional depreciation.

xx. Annual depreciation allowance.

Very excellent economic discussion of the various depreciation theories, with very full quotations from court and commission cases.

WILMOT, H. W. Depreciation. *Journal of Accountancy*, ix, 104-113 (1909).

WYER, S. S. Depreciation. (*In Regulation, valuation and depreciation of public utilities*. Columbus, 1913.) 101-128.

Composed largely of classified quotations from books, articles and cases.

A thorough treatment of the subject in its legal, economic and accounting aspects. Largely technical, with formulae, tables, charts and photographs.

YEAMAN, C. H. Depreciation and reserves for antiquation and obsolescence from an engineering standpoint. *Electrical Engineer*, xl, 46-50 (1907).

A detailed technical discussion of depreciation accounting.

YELLOTT, O. I. Notes on depreciation. Baltimore? 1915? 127 pp.

*In re Chesapeake and Potomac telephone company of Baltimore city rate investigation — Public service commission of Maryland, case 690, March 8, 1916.*

Unusually clear discussion of the fundamental principles of depreciation, with illustrative examples.

YOUNG, A. A. Depreciation and rate control. *Quarterly Journal of Economics*, xxviii, 630-663 (1914).

See also: Depreciation and rate control:

. A criticism. J. S. Davis. xxix, 362-378 (1915).

A reply. A. A. Young. xxix, 378-387.

A rejoinder. J. S. Davis. xxix, 388-395.

Concluding comments. A. A. Young. xxix, 395-400.

and: Depreciation and rate control: a question of justice. John Bauer. xxix, 651-659.

Depreciation and rate control: a further discussion. J. C. Bonbright. xxx, 546-548 (1916).

A very interesting but rather academic discussion.

#### VALUE FOR CONDEMNATION AND PURCHASE

Fox, A. M. Going value in purchase *vs.* rate cases. *Utilities Magazine*, i, no. 3, 152-154 (1916).

HAYES, H. V. Fair present value: condemnation or sale. (*In Public utilities: their cost new and depreciation*. New York, 1913.) 235-243.

MAGUIRE and MOONEY. Compensation for condemnation of property. *Electrical Review and Western Electrician*, lx, 709-710 (1912).

An elementary discussion of when the right of eminent domain may be exercised, and of the resulting cost.

ROSECRANTZ, C. M. Other elements of value. *Proc., American Electric Railway Association*, 1913: 136-152.

A good analysis and historical account of intangibles in valuations for different purposes, with many quotations from court decisions.

— — — Aera, ii, 475-490 (1913).

Reprint.

SILCOCK, E. J. The valuation of waterworks undertakings on transfer to municipal authorities. *Surveyor, Municipal and County Engineer*, xlili, 921-923 (1913).

WAGNER, B. M. The acquisition of private water plants by municipalities. *Journal of the American Waterworks Association*, ii, 25-41 (1915).

Discussion: pp. 582-584. A good account of methods of municipal acquisition and of valuation for condemnation.

WHITTEN, R. H. *Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase.* New York, 1912-1914. 2 vols.

Ch. xxi. Going concern in purchase cases.

xxvi. Franchise value in purchase cases.

xxx. Rules for appraisers in Maine condemnation cases.

Excellent on valuation in condemnation and purchase cases; with full quotations from court and commission decisions.

WILCOX, D. F. *Principles as to franchise values. Utilities Magazine,* i, no. 3, 59-67 (1916).

A good elementary discussion of franchise values for taxation, rate making, condemnation, sale and capitalization.

#### COURT AND COMMISSION ATTITUDE

BAKER, N. D. *Discussion of constitutional protection in valuation.* Utilities Magazine, i, no. 3, 215-216 (1916).

BAUER, JOHN. *Going value in connection with a physical appraisal in a rate case: the New York rule.* Political Science Quarterly, xxx, 463-475 (1915).

Going value: what it is, how it is to be calculated, and when it should be allowed under the rule in the King's county lighting case.

BEALE, J. H., and WYMAN, BRUCE. *Basis of capital charges.* (*In Railroad rate regulation.* 2d edition. New York, 1915.) 209-249.

A good legal discussion of the various theories of valuation; thoroughly annotated.

BETTMAN, ALFRED. *Constitutionality of historical cost method of public utility valuation.* Utilities Magazine, i, no. 3, 46-51 (1916).

A good analysis, with many citations of decisions.

BRYAN, W. H. *Going value as an element in the appraisal of public utility properties.* Journal of the Association of Engineering Societies, xlili, 147-158 (1909).

Discussion: pp. 286-288. A very interesting discussion of intangible values as considered by the Wisconsin commission, and by J. W. Alvord in his "Notes on going value and methods for its computation."

BRYAN, W. H. Going value as an element in the appraisal of public utility properties. *Journal of Electricity, Power and Gas*, xxiv, 31-35 (1910).

Reprint.

DREYFUS, E. D. Reckoning with costs of superseded equipment. *Electrical World*, lxviii, 272-274 (1916).

Includes charts, and statements of the attitude of various commissions.

ERICKSON, HALFORD. Methods of determining life of public utilities. *Engineering and Contracting*, xxxviii, 448-450 (1912).

Abstract. Treats chiefly of methods of estimating life of equipment used by the Wisconsin commission.

— Methods of providing for and recording depreciation. *Engineering and Contracting*, xxxviii, 506-511 (1912).

A technical discussion of the accountancy of depreciation of the Wisconsin commission; with tables.

A continuation of the abstract entitled "Methods of determining life of public utilities."

FLOY, HENRY. Depreciation. (*In Value for rate making*. New York, 1916.) 235-310.

Includes many quotations from court and commission decisions, and certain important cases are considered at length.

— Development expenses, intangible expenses, non-physical costs, overhead expenses. (*In Valuation of public utility properties*. New York, 1912.) 91-128.

Gives tables showing the classification used in the inventory in the Coney Island cases.

FORD, F. R. The theory of street railway rate regulation as developed in the Coney Island fare case. *Proc., American Street and Interurban Railway Association*, 1910: 159-168. Discussion: pp. 169-186.

— — — Electric Railway Journal, xxxvi, 752-755 (1910).

Abstract.

FORSTALL, A. E. A review of recent decisions of public service commissions which affect gas companies. *Proc., American Gas Institute*, v, 460-482 (1910).

Discussion: pp. 482-497. An outline of the principles contained in various decisions; brief but interesting.

FORSTALL, A. E. A review of recent decisions of public service commissions which affect gas companies. *American Gas Light Journal*, xciv, 148-155 (1911).  
Reprint.

FOSTER, H. A. Court decisions. (*In Engineering valuation of public utilities and factories*. New York, 1912.) 264-329.  
Syllabi and quotations from several important valuation cases; excellent for the layman, and of considerable interest for the engineer.

— Franchise. (*In Engineering valuation of public utilities and factories*. New York, 1912.) 236-251.  
Includes many quotations from court and commission decisions.

GILLETTE, H. P. Court decisions showing "present value" to be the only value for rate making purposes. *Engineering and Contracting*, xliii, 302 (1915).

GOETZ, J. H. Court decisions on depreciation. *Utilities Magazine*, i, no. 3, 102-112 (1916).  
An excellent, fully annotated study.

GRUHL, EDWIN. Recent tendencies in valuations for rate making purposes. *Annals of the American Academy of Political and Social Science*, liii, 219-237 (1914).  
An excellent review of court and commission attitude, with many quotations from the cases. Summarizes the conclusions.

Harvard Law Review — Notes. The problem of going value.  
*Harvard Law Review*, xxvii, 744-745 (1914).  
An excellent, but very brief, summary of court decisions, with many citations.

— Valuation of property of public service company as basis for determining rates. *Harvard Law Review*, xxv, 379-381 (1912).  
An excellent summary of court decisions on various points, with many citations.

— Valuation of public service franchises. *Harvard Law Review*, xxviii, 501-505 (1915).  
An excellent brief summary of court decisions, with many citations.

HEILMAN, R. E. Development by commissions of the principles of public utility valuation. *Quarterly Journal of Economics*, xxviii, 269-291 (1914).  
An excellent annotated study, with a brief discussion of the attitude of the various commissions on certain important valuation problems.

HEILMAN, R. E. Some economic aspects of waterworks valuation. *Journal of the American Waterworks Association*, ii, 538-543 (1915).

On the attitude of various commissions towards going value.

HELM, A. E. Principles to be applied in valuation of lands used for the purpose of a common carrier. *Utilities Magazine*, i, no. 3, 88-91 (1916).

Opposes the allowance of unearned increment; includes brief summaries of court decisions.

JURGENSEN, D. F. Misapplication of interest, contingencies and engineering items for valuing railroads by cost of replacement method. *Journal of the Association of Engineering Societies*, li, 95-101 (1913).

Discussion: pp. 237-239. A reply to criticism of his "Railroad valuation: reproduction cost new as a safe basis for rates."

Considers chiefly the Northern Pacific valuation.

— Railroad valuation: reproduction cost new as a sole basis for rates. *Journal of the Association of Engineering Societies*, xlix, 204-214 (1912).

Discussion: 1, 66-67 (1913). Refers to railroads only, but is of interest for other utilities because of expressing the views of the Minnesota railroad and warehouse commission.

KERR, W. D. Constitutional protection in valuation. *Utilities Magazine*, i, no. 3, 208-215 (1916).

MACK, E. S. Standards for rate regulation by commission. ?, 1908 ? 24 pp.

A general discussion of legal aspects of valuation and rate regulation; annotated.

METCALF, LEONARD. Waterworks valuation and fair rates. *Public Service*, v, 185-188 (1908).

Abstract.

— Waterworks valuation and fair rates in the light of the Maine supreme court decisions in the Waterville and Brunswick cases. *Trans., American Society of Civil Engineers*, lxiv, 1-74 (1909).

Technical.

O'BRIEN, T. D. Land values under the Minnesota rate case. *Utilities Magazine*, i, no. 3, 84-85 (1916).  
A very brief account of the court's conclusions, with quotations from the decision.

PROUTY, C. A. The meaning of the constitutional protection in valuation. *Utilities Magazine*, i, no. 3, 204-208 (1916).

ROSECRANTZ, C. M. Other elements of value. Proc., American Electric Railway Association, 1913: 136-152.  
A good analysis and historical account of intangibles in valuations for different purposes, with many quotations from court decisions.

— — — Aera, ii, 475-490 (1913).  
Reprint.

SHARFMAN, I. L. The regulation of railway rates. (*In Railway regulation*. Chicago, 1915.) 87-111.  
Discusses court attitude toward the various theories of valuation, with citations of cases, pp. 100-111.

STEVENS, F. W. Mooted principles in valuation. Proc., American Electric Railway Association, 1914: 23-39.  
On the "distinctions if any between valuation of the properties of public utilities for purposes of rate making, imposition of service requirements, municipal acquisition, issue of capital securities and taxation." Includes many citations.

— — — Aera, iv, 335-349 (1914).  
Reprint.

— — — Electric Railway Journal, xliv, 913-915 (1914).  
Abstract.

THOMAS, P. H. Rate making for public utilities: the Madison case. *Electric Journal*, vii, 560-574 (1910).  
A thorough discussion of the State Journal printing company case before the Wisconsin commission.

THORNE, CLIFFORD. Going value as an element of fair value. *Utilities Magazine*, i, no. 3, 138-152 (1916).  
An excellent analysis, including a review of commission decisions.

WHERRY, W. M., JR. Franchise values. Proc., American Electric Railway Association, 1913: 124-135.  
A good historical treatment of the difference between cost and value of franchise; with quotations from court decisions.

WHITTEN, R. H. *Valuation of public service corporations: legal and economic phases of valuation for rate making and public purchase.* New York, 1912-1914. 2 vols.

A very excellent treatise; the standard work on the subject. Each chapter consists of economic and theoretical discussion, together with very full quotations from all important court and commission cases. Volume II is supplementary to volume I, and contains the decisions from 1912 to the spring of 1914. The chapter headings are practically identical.

For list of chapters, see p. 199.

WYER, S. S. *Regulation, valuation, and depreciation of public utilities.* Columbus, 1913. 313 pp.

Depreciation: pp. 101-128.

Valuation: pp. 159-175.

Going value and going concern value: pp. 176-183.

Composed largely of classified quotations from books, articles and cases.

## VI. RATES

### HISTORY

#### UNITED STATES AND FOREIGN

BERCOVITZ, D. Continental systems of charging for current by contract. *Electrician*, lxix, 730-732 (1912).  
Abstract. A brief but interesting analysis.

FRANCISCO, M. J. Municipal ownership *vs.* private corporations: with legal and editorial opinions, tables, and cost of lights as furnished by private companies and municipal plants, with list of municipal plants that have been sold or abandoned. Containing also a comparison of English and American gas and railway plants. *Rutland*, 1898. 150 pp.

#### UNITED STATES — GENERAL

ADAMS, A. D. Cost of municipal *vs.* private gas. *Municipal Journal and Engineer*, xv, 13-14 (1903).

Includes an analytical table of the average cost of gas in the private and municipal plants of each state.

— Gas rates in the United States. *Municipal Journal and Engineer*, xiii, 63-65 (1902).

— Meter rents and minimum rates. *Electrical World*, lv, 525-527 (1910).

A brief account of the law in various places — statutory, and court and commission decisions.

BEMIS, E. W. The latest electric light reports. (*In Municipal monopolies*. 4th edition. New York, 1904.) 183-285.

Includes tables of rates charged in American cities.

CAHOON, J. B. Municipal electric lighting opposed. *Municipal Affairs*, vi, 636-647 (1902).

Includes a table of rates charged in American cities.

COMMONS, J. R. Municipal electric lighting. *Municipal Affairs*, i, 631-673 (1897).  
Includes tables of rates charged in American cities.

— — — (In BEMIS, E. W. *Municipal monopolies*. 4th edition. New York, 1904.) 55-180.  
Reprint.

COOPER, M. D. The history and economics of central station rate making. *Wisconsin Engineer*, xv, 107-116 (1910).  
History and discussion of various forms of electric rates; includes many citations of articles.

CROWELL, H. H. Electric lighting rates and depreciation. *Municipal Journal and Engineer*, xxiii, 698 (1907).  
Gives a table of electric rates in fifteen cities.

DICKERMAN, J. C. Comparison of electric light and power rates. *Power*, xlvi, 8-15 (1915).  
An excellent comparative study of the rates in many American cities, with many charts and tables; technical.

FORD, F. R. Passenger rates and fares in cities with surface street railways and elevated railroads or subways. *Proc., American Electric Railway Association*, 1912: 277-294.  
Memorandum with "Report of the committee on determining the proper basis for rates and fares."  
A valuable study, by cities, with tables of statistics.

— — — *Aera*, i, 400-409 (1912).  
Abstract.

— — — *Electric Railway Journal*, xl, 1108-1112 (1912).  
Abstract.

FRANCISCO, M. J. The business of municipalities and private corporations compared: data that proves municipal ownership waste exceeds corporate profit. *Rutland*, 1905? 136 pp.  
Many plants considered alphabetically by cities; only a sentence or two about each.

— — — Municipalities *vs.* private corporations: political and business management. *Rutland*, 1900. 172 pp.  
"Tables showing cost of lights furnished by private companies and municipal plants, a list of municipal plants sold or abandoned, experience of municipalities, legal and editorial opinions."

GWINN, D. R. Water rates charged in 375 cities. Proc., American Waterworks Association, xxviii, 209-222 (1908).

Discussion: pp. 223-238. Tabulated results of a questionnaire. Rates of private plants: pp. 216-218; rates of municipal plants: pp. 219-222.

HATCH, A. S. Cost of electric lighting in cities. Municipal Engineering, xxxi, 201-203 (1906).

A tabulation of the rates in many American cities, with some discussion.

HEIM, J. B. Meter rates. Proc., American Waterworks Association, xxiv, 251-267 (1904).

Discussion: pp. 277-289. Includes an elaborate table of waterworks statistics and charges in various American cities.

KOINER, C. W. Municipal ownership and operation of electric utilities on the Pacific coast. Proc., American Society of Municipal Improvements, 1914: 347-367.

Includes tables of rates and statistics in various cities.

MCGRATH, D. J. Long rides for a nickel. Electric Railway Journal, xlviii, 222-225 (1916).

Maps of the single fare zones in twenty-five typical American cities, with brief discussion.

METCALF, LEONARD. Private fire protection service charges.

Proc., American Waterworks Association, xxxiii, 127-152 (1913).

Discussion: pp. 158-190. An account of an investigation supplementing Metcalf, Kuichling and Hawley, "Some fundamental considerations in the determination of a reasonable return for public fire hydrant service."

—, KUICHLING, E., and HAWLEY, W. C. Some fundamental considerations in the determination of a reasonable return for public fire hydrant service. Proc., American Waterworks Association, xxxi, 55-117 (1911).

Includes tables of rates charged in different cities.

Milwaukee Gas Light Company. Prices charged for gas in various cities of the United States from 1885 to 1907, inclusive. Milwaukee, 1907? 28 pp.

An excellent and very complete tabulation.

PATTON, W. A. At what rate can water be profitably sold when pumped against a 300-foot head? Proc., American Waterworks Association, xxiv, 490-496 (1904).

A discussion of the rates in various places.

ROSAMOND, S. J. What would be a fair basis for fixing water rates for fire and domestic service? Proc., American Waterworks Association, xxv, 132-138 (1905).

Discussion: pp. 139-150. An analysis of the rates of seventy cities; with large comparative tables of statistics.

U. S. Bureau of the Census. Street and electric railways, 1907.

Washington, 1910. 575 pp.

Fares and transfers: pp. 248-252.

WAGNER, B. M. Rates for water supply. Journal of the New England Waterworks Association, xxix, 1-48 (1915).

A very good general article, including an account of water rate history and a discussion of the various forms of rates; with tables.

WHIPPLE, F. H. The cost of public lighting. (*In* Municipal lighting. Detroit, 1889.) 120-217.

Alphabetical, by cities.

WHITEHORNE, E. E. The value of the poor man's business. Electrical World, lxvii, 201-203 (1916).

Popular account of the use of controlled flat rates in various cities; illustrated with photographs.

WYER, S. S. Reasonableness and legal right of the "minimum charge" in public utility services. Columbus, 1916. 113 pp.

Part I. Fundamental principles.

II. Adjudicated monthly monetary allowances for minimum charges.

III. Non-adjudicated minimum charges in existing rate schedules.

Consists of a brief discussion, largely in the form of quotations from articles and cases, followed by tables of minimum charges in different cities. An excellent compilation.

*Pasadena*

CALIFORNIA

KOINER, C. W. Pasadena's municipal light and power plant. Annals of the American Academy of Political and Social Science, lvii, 209-227 (1915).

Historical account, with tables of rates charged.

## GEORGIA

COLLIER, W. R. The sale of current to municipally owned distributing systems by central stations. *Electrical Review and Western Electrician*, lxvii, 890-893 (1915).

Embodies the results of a study in Georgia, illustrated with tables and charts.

## IDAHO

WALKER, H. B. Government furnishes cheap electricity. *Power*, xli, 228-229 (1915).

Electricity sold to small towns in southern Idaho by a government hydroelectric plant, which forms part of the Minidoka irrigation project. Gives tables of rates charged.

## ILLINOIS

*Chicago*

BEMIS, E. W. Report upon the price of gas in Chicago for the Chicago council committee on gas, oil and electric light. Chicago, 1911. 31 pp.

Includes many tables of statistics.

MARSTON, GLENN. Gas rates and politics in Chicago. *Public Service*, x, 72-74 (1911).

MEAD, D. W. The cost of furnishing water with reference to rates and rate making. *Proc., American Waterworks Association*, xxx, 92-96 (1910).

Discussion: pp. 96-109. A brief comparison and discussion of the water rates of private and municipal supply in Chicago, 1901-1902; includes tables of statistics.

PALMER, RAY. Municipal lighting rates. *Annals of the American Academy of Political and Social Science*, lvii, 33-44 (1915).

Discussion of how to compare electric lighting rates of different cities; includes tables of electric rates in Chicago, with some discussion.

— Street lighting rates and cost factors. *American City*, xi, 462-466 (1914).

Abstract of his "Municipal lighting rates."

## IOWA

*Iowa City*

DUNLAP, J. H. The water meter rates of Iowa City. *Water and Gas Review*, xxvi, 20-23 (1916).

The results of an investigation for the city council of a proposed rate schedule; with tables.

## LOUISIANA

*New Orleans*

EARL, G. G. Water rates. *Proc., American Waterworks Association*, xxxi, 173-189 (1911).

Discussion: pp. 189-216. Includes an analysis of rates for New Orleans.

## MARYLAND

*Baltimore*

BURNETT, DOUGLASS. Differential gas rates in Baltimore. *Gas Age*, xxxvii, 137-140 (1916).

Semi-technical; with a number of charts.

## MASSACHUSETTS

ADAMS, A. D. Cost of light in municipal and private gas and electric plants. *Municipal Engineering*, xxiii, 160-164 (1902). A statistical comparison of the cost in Massachusetts.

— Regulation of electric rates in Massachusetts. *Electrical World and Engineer*, xlvi, 391-392, 442-443, 484-486 (1905). Gives the facts and rulings in various cases before the commission, without discussion.

— Regulation of gas and electric rates in Massachusetts. *Electrical World and Engineer*, xlvi, 310-311, 348-349 (1905). Gives the facts and rulings in various gas rate cases before the commission, without discussion.

MARKS, W. D. The cost of electricity. *Electrical World*, lvi, 265-269 (1910).

Supplementary to his "The price of electricity."

— The price of electricity. *Electrical World*, liv, 555-559 (1909).

Includes tables and charts for Massachusetts.

*Boston*

RICHARDS, J. L. The Boston consolidated gas company: its relation to the public, its employees, and investors. *Annals of the American Academy of Political and Social Science*, xxxi, 59-65 (1908).

A brief historical account; including a table of the prices paid for gas in Boston from 1828 to 1907.

*Holyoke*

TIGHE, J. L. Water consumption, waste and meter rates. *Proc., American Waterworks Association*, xxviii, 69-84 (1907). Discussion: pp. 85-103. On the experience of Holyoke; with tables and charts.

*Spencer*

PLATTNER, WILLIAM. Spencer's modern street lighting contract. *Utilities Magazine*, i, no. 5, 28-29 (1916).

*Worcester*

MARKS, W. D. The law of demand for electricity: reduction of price increases profits. (*In Practical rate making and appraisement*. South Hadley, 1914 ?) 200-214.

Chiefly an analysis of electric rates in Worcester.

## MICHIGAN

*Detroit*

FULLERTON, IRWIN. Do low fares increase riding? *Electric Railway Journal*, xlivi, 770 (1914).

An account of a fare reduction experiment made by the Detroit united railway company.

MOORE, CHARLES. Electric lighting in the city of Detroit. Publications, *American Economic Association*, ii, 539-550 (1888).

*In The relation of modern municipalities to quasi-public works.* Historical; includes a table of the charges for street lighting in various cities.

*Grand Rapids*

FOOTE, MARK. Is a five cent street car fare equitable? *Public Service*, ix, 139-141 (1910).

Experience in Grand Rapids.

## MINNESOTA

GESELL, G. A. Minnesota public utility rates: gas, electric, water. Minneapolis, 1914. 254 pp.  
 University of Minnesota, Current problems, no. 3.  
 By cities, for each service.

*Minneapolis*

DEACON, W. G. Electric rates for Minneapolis. Public Service, v, 107-110 (1908).  
 History of the controversy.  
 JONES, S. P. Lower gas and electric rates in Minneapolis. Utilities Magazine, i, no. 5, 29-30 (1916).  
 A very brief account of a current reduction in rates.

MARKS, W. D. Recapitulation of report upon the fair and reasonable price of a 6.6 ampere magnetite arc light per year. (*In* Practical rate making and appraisement. South Hadley, 1914 ?) 60-113.  
 A detailed study of street lighting rates in Minneapolis, with tables of statistics.

*St. Paul*

FEURTADO, R. S. The fair price of gas at St. Paul. Public Service, iii, 173-179 (1907).

## MISSOURI

*St. Louis*  
 EISENMENGER, H. E. Graphical analysis of the St. Louis residence rates. Electrical World, lix, 644-645 (1912).  
 A brief graphical analysis with charts; highly technical and theoretical.  
 SPOHRER, H. H. Electric rates. Electrical Review and Western Electrician, lx, 747-748 (1912).  
 On a new schedule of electric rates adopted by the Union electric light and power company of St. Louis, with some discussion; technical.

## NEW YORK

*Elmira*  
 DIVEN, J. M. Special fire protection rates and regulations, Elmira, N. Y. Proc., American Waterworks Association, xxvii, 460-462 (1907).  
 Includes the schedule of rates.

*New York*

**MARKS, W. D.** Quantity rates for electricity. (*In Practical rate making and appraisement*. South Hadley, 1914?) 114-143.

Discusses chiefly electric rates in New York City. A detailed study, with many tables and charts.

**OHIO***Cleveland*

**BRASHEARS, W. F.** Passing of three cent fares. *Public Service*, xvii, 101-103 (1914).

— Three cent car fares on trial. *Public Service*, xiv, 201-204 (1913).

An analysis of the results with tables of statistics.

**CLOUGH, E. B.** The truth about Cleveland traction. *Public Service*, ii, 133-135 (1907).

History under Mayor Johnson.

**Doolittle, F. W.** The Cleveland experiment. (*In Studies in the cost of urban transportation service*. New York, 1916.) 355-438.

An excellent study of the history of Cleveland traction franchises and fare experiments.

*Toledo*

**DEACON, W. G.** A three cent car fare test. *Public Service*, xvi, 141-142, 157-160 (1914).

H. L. Doherty offers to allow Toledo to operate the street railways for one year.

**OREGON***Eugene*

**MEYERS, ALVIN.** Eugene, Ore., municipal light and water plant. *Municipal Engineering*, xliv, 427-428 (1913).

Includes the schedule of electric rates.

**PENNSYLVANIA***Philadelphia*

**DICKERMAN, J. C.** Lower electric rates in Philadelphia. *American City*, xiv, 341-342 (1916).

A popular account of litigation before the commission.

## TEXAS

PAXTON, E. T. Public service rates in Texas cities. Austin, 1915. 141 pp.

Bulletin of the University of Texas: Municipal research series, no. 10. Tables of rates charged for: water, sewerage, electric light and power, telephone and traction. Arranged by cities, under each service.

*Houston*

SHELDON, P. H. Controversy over electric rates in Houston, Texas. *Municipal Engineering*, xlvii, 275-278 (1914). Includes tables.

*St. Albans*

## VERMONT

RENNER, C. J. The experience of a small city with water meters and water rates. *American City*, xi, 474-478 (1915). Illustrated with tables and charts.

*Seattle*

## WASHINGTON

Ross, J. D. Seattle, Wash., municipal light and power plant. *Municipal Engineering*, xliv, 556-560 (1913). Includes the schedule of rates.

*Spokane*

MARKS, W. D. Recapitulation of report on gas rates and prices for the city of Spokane. (*In Practical rate making and appraisement*. South Hadley, 1914 ?) 11-59. A detailed study, with tables of statistics.

## WISCONSIN

CRAVATH, J. R. Demand and diversity factors and their influence on rates. *Electrical World*, lvi, 567-570 (1910).

A good discussion, with tables compiled by the Wisconsin commission; semi-technical.

HOLMES, F. L. Regulation of railroads and public utilities in Wisconsin. New York, 1915. 375 pp.

Ch. x. Making of utility rates.

  xii. Electric, gas and heating utilities.

  xiv. Water utilities.

A good account of the practice of the Wisconsin commission, with many quotations from decisions.

MATHEWS, G. C. Wisconsin water rates. *Public Service Regulation*, i, 33-35 (1912).

Discussion of the methods and procedure used.

MILLER, W. E. Ashland water rate decision explained. *Engineering Record*, lxxi, 805-807 (1915).

On decisions of the Wisconsin commission refusing to accept 4 per cent as an adequate return, and revising rates.

STEARNS, R. B. The Milwaukee fare case. *Proc., American Electric Railway Association*, 1912: 234-244.

Discussion of a decision of the Wisconsin commission.

WATKINS, G. P. Electrical rates in the opinions of the Wisconsin commission. *Quarterly Journal of Economics*, xxvii, 373-378 (1913).

#### *Madison*

HEIM, J. B. Meter rates. *Proc., American Waterworks Association*, xxiv, 251-267 (1904).

Discussion: pp. 277-289. An account of a rate controversy in Madison; includes an elaborate table of waterworks statistics and charges in various American cities.

#### *Milwaukee*

DOOLITTLE, F. W. The Milwaukee experiment. (*In Studies in the cost of urban transportation service*. New York, 1916.) 439-467.

An excellent study of traction franchise and fare history in Milwaukee.

MILLER, W. E. Charges for public water service to private fire protection systems. *Proc., American Waterworks Association*, xxxiii, 115-125 (1913).

A discussion of the charges in Milwaukee.

STEARNS, R. B. Zone system of fares in practice. *Electric Railway Journal*, xlvi, 836-838 (1915).

A good analysis of the results of six months' operation in Milwaukee, illustrated with two charts.

#### *Platteville*

BUTTERWORTH, W. C. The cost and price of gas in a small city. *American Gas Light Journal*, cii, 180-183 (1915).

An elaborate tabular comparison of the cost and rates for gas in Platteville, with some discussion.

**CANADA**

BOLTON, R. P. Cheap electricity in Toronto. *Concerning Municipal Ownership*, ix, 8-10 (1916).  
 Supplementary to "Our interest in Canadian operations."

— Favoritism in rates. *Concerning Municipal Ownership*, viii, 278-281 (1915).  
 Supplementary to "Our interest in Canadian operations."

CHRISTIE, A. G. Calgary's municipal power plant. *Power*, xlili, 352-357, 389-390 (1916).  
 Chiefly descriptive, but includes brief discussion of rates and operation.  
 Illustrated with diagrams and photographs.

ROBINSON, S. C. What would be a proper charge for a service under these conditions? *Proc., American Waterworks Association*, xxviii, 545-547 (1908).  
 A very brief discussion of rates for private fire protection at Walkerville, Ontario.

SARA, R. A. Another municipal electric plant supplying lighting current at three cents per kw.-hr. *Engineering News*, lxxii, 655-656 (1914).  
 Brief account of the Winnipeg plant, with tables of rates and operating statistics.

**FRANCE**

DARY, GEORGES. The charges for electrical energy supply in France. *Electrical Review* (London), lxii, 1045-1046, 1086 (1908).  
 A discussion of the electric rates in various cities.

**GERMANY**

DEFODOR, ETIENNE. Rates for electricity supply. *Trans., International Electrical Congress*, ii, 500-512 (1904).  
 Discussion: pp. 512-517. General discussion; including rates in German cities.

**GREAT BRITAIN**

CLARK, W. J. British municipal tramway conditions. *Aera*, i, 658-664 (1913).  
 The writer concludes that British tramway fares are but little below ours, and without question unprofitable.

DAVIES, F. H. British central station rates. *Electrical World*, lv, 628-629 (1910).

A brief but interesting discussion of the various rates in use in England.

RIDER, J. H. Charges for supply from combined lighting and traction stations. *Electrical Engineer*, new series, xxxvi, 24-26 (1905).

An analysis of costs, with tables of rates charged in various English cities.

SEABROOK, A. H. An English central station rate system. *Electrical World*, liv, 919-921 (1909).

A proposed schedule of electric rates for the Borough of St. Marylebone, with suggested tables of rates and discussion.

TOPPIN, W. A. The present tendency of charging for electricity. *Electrical Review* (London), lx, 945-947 (1907).

A discussion of the lack of uniformity of rates in English towns, with a tabulation of rates and reasons for the recent changes in each.

YERBURY, H. E. Equitable charges for tramway supply. *Journal of the Institution of Electrical Engineers*, xliv, 576-600 (1910).

Discussion: pp. 606-663. Includes rate elements, tables of rates charged in Great Britain and charts.

— — — Tramway and Railway World, xxvii, 108-111 (1910).

Discussion: pp. 111-112. Abstract.

### ITALY

SEMENZA, GUIDO. Methods of charging for electric motive power. *Proc., National Electric Light Association*, 1907: vol. i, 520-532.

On the methods in use in Italy; technical, with formulae and charts.

### RATE SCHEDULES

#### GENERAL WORKS

ADAMS, A. D. Meter rents and minimum rates. *Electrical World*, lv, 525-527 (1910).

A brief account of the law in various places — statutory, and court and commission decisions.

BAUER, JOHN. Returns on public service properties. *Political Science Quarterly*, xxx, 106-133 (1915).  
On rate making principles, railroad rates being emphasized. Municipal utility rates are discussed, pp. 107-112.

BEALE, J. H., and WYMAN, BRUCE. General principles governing compensation. (*In Railroad rate regulation*. 2d edition. New York, 1915.) 177-208.  
An annotated study of the legal principles underlying schedules of rates as a whole. Refers only to railroads, but is of general interest.

BLUE, F. K. The practical application of the self-adjusting standard for rate fixing. *Journal of Electricity, Power and Gas*, xxx, 386-389, 403-404 (1913).  
Supplementary to his "The public and public service corporations." Technical, with a table and illustrative examples.

— The public and public service corporations. *Journal of Electricity, Power and Gas*, xxix, 483-484 (1912).  
Outlines of a proposed method of automatically controlling rate level and rate of return.

— Rate fixing and appraisals: automatically directed method of rate fixing and price control. *Journal of Electricity, Power and Gas*, xxix, 500-501 (1912).  
Supplementary to his "The public and public service corporations."

COOLEY, M. E. Factors determining a reasonable charge for public utility service. *Trans., American Institute of Electrical Engineers*, xxxii, 2077-2095 (1913).  
A general discussion of valuation and other elements used in determining upon a schedule of rates as a whole.

— — Journal of the Western Society of Engineers, xix, 1-17 (1914).

— — Public Service, xvi, 45-46, 60-62, 97-98, 129-130 (1914).  
Abstract.

DOHERTY, H. L. Methods of charging for public service. *Public Service*, x, 9-12 (1911).

ERICKSON, HALFORD. Some facts relating to depreciation and rate making. *Electrical Review and Western Electrician*, lxiv, 234-238 (1914).  
Elementary.

FOOTE, A. R. Cost of service to users and tax payers. (*In Municipal public service industries.* Chicago, 1899.) 211-247.

A brief discussion of methods of charging, and comparison of prices.

— Cost of service to users and taxpayers: the only proper basis for comparisons between private and municipal ownership of water, gas and electric lighting works. Cincinnati, 1897. 100 pp.

HAMILTON, STACY. A résumé and comparison of rate theories. *Journal of Electricity, Power and Gas*, xxxiii, 357-361, 384-387 (1914).

Discussion: pp. 387-394. "Discusses some of the good and bad features of various rate theories and schedules, particularly as interpreted in the light of commission decisions."

An excellent analysis, with citations for each kind of rate.

HANEY, L. H. Joint costs with especial regard to railways. *Quarterly Journal of Economics*, xxx, 233-252 (1916).

A very theoretical and thorough treatment of the subject, of interest for all public utilities.

HOLMES, F. L. Regulation of railroads and public utilities in Wisconsin. New York, 1915. 375 pp.

Ch. x. Making of utility rates.  
xii. Electric, gas and heating utilities.  
xiv. Water utilities.

A good account of the principles of rate making, in the form of a commentary on the practice of the Wisconsin commission.

HOXIE, G. L. Some features of rate fixing for electric public service properties. *Journal of Electricity, Power and Gas*, xxviii, 397-399 (1912).

KELSBY, G. H. The cost and sale of power by railways. *Street Railway Journal*, xxix, 207-209 (1907).

A discussion of the cost factors which should be included, and as to whether the sale of power is desirable; semi-technical.

— The cost and sale of railway power. *Electric Railway Review*, xvii, 126-129 (1907).

LAWLER, J. C. A schedule of rates involving the investment cost of reaching the consumer. *Electrical World*, lvii, 1562-1565 (1911).

A technical discussion of the proposed schedule, with illustrative examples and tables.

RANDOLPH, L. S. The ethics of allowance for depreciation. *Engineering Magazine*, xxxix, 692-696 (1910).

On the various methods of allowing for depreciation in rates, and their results.

Rate Research, Chicago, 1912 —; weekly.

Published by the Rate research committee, National electric light association. Contains abstracts and comments on decisions and articles.

RAYMOND, W. G. Rate making for public utilities. Iowa City, 1914. 10 pp.

State University of Iowa, Extension division bulletin, no. 2. An elementary and popular account of rate making principles.

— — — Municipal Engineering, xlvi, 520-525 (1914). Abstract.

— — — Suggestions for public utility rate making. *Engineering News*, lxxi, 510-512 (1914). Abstract.

RICE, FREDERICK, JR. Are public service charges too low? *Moody's Magazine*, iv, 585-587 (1907).

RICKARDS, A. E. Purchased power: its advantages versus its cost. *Electrical Review and Western Electrician*, lxi, 540-543 (1912).

An attempt to show that the largest customers can be obtained on the basis of service advantages rather than cost.

STRAIT, E. N. Wisconsin commission method of rate making. *Gas Age*, xxxv, 263-268 (1915).

Describes the "mechanical procedure" by which gas and electric rates are derived. Includes illustrative tables and one chart.

TAUSSIG, F. W. A contribution to the theory of railway rates. *Quarterly Journal of Economics*, v, 438-465 (1891).

A good, but highly theoretical, article on the influence of joint costs and value of service on rates.

TAUSSIG, F. W., and PIGOU, A. C. Railway rates and joint cost. *Quarterly Journal of Economics*, xxvii, 535-538 (1913). A continuation of the discussion in Taussig's "Railway rates and joint cost once more."

— Railway rates and joint cost once more. *Quarterly Journal of Economics*, xxvii, 378-384 (1913). A discussion of A. C. Pigou, "Wealth and welfare," and a reply to Pigou's criticism of Taussig.

WILCOX, N. T. Some reasons for difference in price for different electric services. *Public Service*, x, 178-179 (1911).

WYER, S. S. Principles governing cost of utility services. (*In Regulation, valuation and depreciation of public utilities*. Columbus, 1913.) 184-202. Composed largely of classified quotations from books, articles and cases. A thorough analysis of costs and rates.

— Reasonableness and legal right of the "minimum charge" in public utility services. Columbus, 1916. 113 pp. An excellent compilation, including a brief discussion, largely in the form of quotations from articles and cases.

### ELECTRIC

ABELL, H. C. Rates for electric service. *Electrical World*, lviii, 345-347 (1911). An account of the procedure used in an actual case in preparing a schedule of electric rates; includes one chart.

ADAMS, A. D. Rates for hydroelectric service. *Electrical World*, iv, 354-356 (1910). A non-technical discussion of the reasons for the very low rates offered by ten companies.

ALLISON, J. E. Analysis of the rate calculations for electric light and power. St. Louis? 1911? 39 pp. Report to St. Louis public service commission. Criticism of certain forms of rates. Technical, with formulae and charts.

— Rate calculations for electric light and power. St. Louis? 1911? 24 pp. Report to St. Louis public service commission. An answer to criticisms of his "Analysis of the rate calculations for electric light and power."

ASHLEY, H. W. Public policy and legal regulation of central station charges. *Engineering Magazine*, xlvi, 545-546 (1914). A brief arraignment of public utilities for using wholesale electric rates. For a reply, see R. D. De Wolf, "Electric central station rates."

— Public service electric rates. *Practical Engineering*, xviii, 877-879 (1914).

— Theories of electric current rate schedules. *Engineering Magazine*, xlviii, 86-88 (1914). The writer opposes low wholesale rates as being inequitable on the basis of actual cost. See a criticism by C. S. Reid and a defense by H. D. Jackson, under the same title.

BAKER, C. A. The influence of tariffs on electricity supply. *Electrical Review* (London), I, 458-459, 534-535 (1902). A thorough study of the effect of the form of electric rates upon the load factor and financial results; with tables of statistics from many English cities. The writer concludes that the flat rate "is the only one at present in general use which may be considered satisfactory all round to both consumer and producer." See reply by J. R. Dick, with same title.

BARHAM, A. W. The problem of the small consumer. *Electrician*, lxxii, 1076-1077 (1914). On the form of electric rates desirable for the small consumer; semi-technical.

BAUM, F. G. The best control of public utilities. *Trans., American Institute of Electrical Engineers*, xxxiv, 145-167 (1915). The writer advocates class rates to avoid the appearance of discrimination, and a liberal rate of return to secure extensions. Includes charts and formulae; non-technical.

— — — Stone and Webster Public Service Journal, xvi, 100-110 (1915). Abstract.

— Class rates for light and power systems or territories. *Trans., American Institute of Electrical Engineers*, xxxiv, 1693-1713 (1915). Discussion: pp. 1714-1729. The writer advocates uniform rates for each class of service throughout a territory, with a sliding scale for quantity, thus avoiding any appearance of discrimination. Eight different classes of service are suggested. Technical, with charts and diagrams; very good paper.

BECKJORD, W. C. Rates for electric service. *Electrical Review and Western Electrician*, lxviii, 1073-1075 (1916). Brief analysis of various forms of rates, with charts and tables.

BETTS, G. W. Legal justification for differential rates. *Proc., National Electric Light Association*, 1907: vol. i, 189-201. Discussion: pp. 201-205. Citation and discussion of the cases; semi-technical; good.

BORDEN, S. W. A safe energy rate for small central stations. *Electrical World*, lvi, 869-871 (1910).

BOWDEN, J. H., and TAIT, FRED. Equitable charging for the supply of energy by municipal electricity undertakings. *Electrical Review (London)*, lix, 323-324 (1906). Includes illustrative examples.

— The standardization of tariffs. *Electrician*, lxxiii, 446-448, 457-458 (1914). A detailed outline of a proposed standard method, dispensing with diversity factor and load factor.

BRANDEIS, L. D. Central power station rates: a legal opinion. *Utilities Magazine*, i, no. 6, 4-8 (1916).

BRIGGS, W. W. Proposed dividend type domestic service rate. *Electrical World*, lxviii, 850-853 (1916). Includes tables and a sample schedule.

BULLARD, J. E. Rate systems from the central station solicitor's viewpoint. *Electrical World*, ix, 1042-1045 (1912). Includes tables and charts.

BURNAND, W. E. Low rates and the development of the central station service. *Electrical World*, lix, 261-263 (1912). "A suggested schedule involving central station control of customers' meters, transferring them to a higher rate only at times of extraordinary peak loads."

BURNETT, H. R. The costs of electricity supply and their relation to scales of charges. *Electrical Engineer, new series*, xl, 9-12 (1907). Technical; with charts.

CHAPPELLE, C. C. Some problems of rate making. *Public Service*, xiv, 57-59 (1913).

COLLIER, W. R. The sale of current to municipally owned distributing systems by central stations. *Electrical Review and Western Electrician*, lxvii, 890-893 (1915).  
Embodies the results of a study in Georgia, illustrated with tables and charts.

CONKLIN, L. H. Rates for electric service. *Electrical World*, lxii, 1167 (1913).

COOPER, M. D. The history and economics of central station rate making. *Wisconsin Engineer*, xv, 107-116 (1910).  
Includes many citations of articles.

CORSON, F. H. Industrial power supply from municipal stations. *Electrical Review* (London), lix, 123-124 (1906).  
A discussion of very low power rates to compete with more modern private plants.

COWAN, E. W. The price of electricity. *Electrician*, lxv, 895-897, 932-933 (1910).  
The writer opposes demand rates, in spite of equity, and believes rates should be adapted to what the traffic will bear; includes charts.

CRAPPER, E. H. Methods of charging for electrical energy. *Electrician*, ix, 330-332 (1903).  
— — — *Electrical Engineer*, new series, xxxiii, 117-124 (1904).

CRAVATH, J. R. Demand and diversity factors and their influence on rates. *Electrical World*, lvi, 567-570 (1910).  
A good discussion, with tables compiled by the Wisconsin commission; semi-technical.

DAY, CHARLES. A constructive policy for public service corporations. *Annals of the American Academy of Political and Social Science*, lvii, 83-93 (1915).  
Good outline of policies for utility management, including a discussion of the advantages of three-part electric rates. Somewhat elementary.

DE FODOR, ETIENNE. Rates for electricity supply. *Trans., International Electrical Congress*, ii, 500-512 (1904).  
Discussion: pp. 512-517. General discussion; including rates in German cities.

**DE WOLF, R. D.** Electric central station rates. *Engineering Magazine*, xlvi, 959-961 (1914).

A brief argument for three-part and wholesale rates.

A criticism of H. W. Ashley, "Public policy and legal regulation of central station charges."

**DICK, J. R.** The influence of tariffs on electricity supply. *Electrical Review* (London), l, 673 (1902).

A reply to an article by C. A. Baker, with the same title.

**DOHERTY, H. L.** Equitable, uniform and competitive rates. *Proc., National Electric Light Association*, 1900: 291-321.

Discussion: pp. 322-343. An excellent, thorough discussion of various electric rates, with a proposed modified form of electric rate; technical. Includes tables and charts, with illustrative examples.

— The rate question. *American Gas Light Journal*, lxxiv, 171-172 (1901).

A discussion of flat and meter rates for electricity.

**DOW, ALEX.** The art of rate making. *Electrical World*, lxv, 17-18 (1915).

A good elementary article on electric rate schedules as a whole.

**DREYFUS, E. D.** Some notes on the large power rate. *Electrical Review and Western Electrician*, lxiv, 419-423 (1914).

Semi-technical, with charts.

**DRUAR, J. F.** Rates and rate making. *Journal of the Association of Engineering Societies*, l, 221-233 (1913).

Elementary.

**EDMONDSON, W. H.** A mechanical computer for electric energy rates. *Electrical World*, lix, 1391-1392 (1912).

A brief account of a slide rule, with illustrative charts and a cut.

**EINSTEIN, A. C.** Central station rate schedules for retail customers. *Electrical World*, lvi, 1077-1079 (1910).

A good discussion of hours'-use rates; with illustrative forms.

**EISENMENGER, H. E.** The computation of the cost of current. *Electrical Review and Western Electrician*, lxv, 335-339 (1914).

A theoretical and highly technical study, with charts and formulae.

EISENMAYER, H. E. Graphical analysis of the St. Louis residence rates. *Electrical World*, lix, 644-645 (1912).  
Highly technical and theoretical.

— Some geometrical aspects of the three-charge-rate system. *Electrical Review and Western Electrician*, lviii, 280-287, 332-336, 384-387 (1911).  
Technical and theoretical; with many diagrams.

— Space representation of central station rates. *Electrical World*, lviii, 1126-1132 (1911).  
An analytical and graphical study of central station rates and their representation in space by means of points on planes.  
Highly technical and theoretical; with many diagrams.

— The theoretical basis of the multiple rate system. *Electrical World*, lxi, 1085-1091 (1913).

ELLIS, R. L. Rates for electricity. *Engineering Magazine*, xliii, 227-233 (1912).  
A good, non-technical discussion of various forms of electric rates, with special consideration of the Hopkinson rate.

ERICKSON, HALFORD. Electric lighting and power rates. *Annals of the American Academy of Political and Social Science*, liii, 238-250 (1914).  
An excellent elementary account of how electric rates are made, with illustrative examples.

— Making rates for electric current. *Public Service*, xi, 119-121 (1911).

— Making rates for electric plants. *Public Service Regulation*, i, 579-585 (1912).

— Regulation of public utilities: three discussions. *Madison*, 1911. 66 pp.  
Rates for electric current: pp. 3-18.

ESSON, W. B. Principles and profits in electrical supply. *Electrician*, xlviii, 419-421 (1902).  
A reply to Arthur Wright, "Some principles underlying the profitable sale of electricity."  
The writer believes the maximum demand method erroneous and proposes a substitute.

FERNIE, F. Diversity factors. *Electrician*, lxi, 556-557 (1908).  
Very technical, with formulae and examples.

FOWLE, F. F. Discrimination in central station rates. *Engineering Magazine*, xli, 406-415 (1911).  
On three-part electric rates, and the desirability of rigid rate regulation.  
Interesting and non-technical.

FOWLER, C. P. Some fundamental principles underlying the sale of electrical energy. *Electrical World*, l, 456-459 (1907).  
A good, semi-technical discussion, with illustrative examples.

GEAR, H. B. Diversity factor. *Trans., American Institute of Electrical Engineers*, xxix, 375-384 (1910).

— Diversity factor in the distribution of electric light and power. *Journal of the Western Society of Engineers*, xv, 572-581 (1910).  
Discussion: pp. 581-586. A very good technical discussion of the effect on costs and operation; with charts and diagrams.

GILLE, H. J. Public service corporation rates. *Stone and Webster Public Service Journal*, ii, 740-744 (1908).

GOLDMAN, O. B. The multiplex cost and rate system. *Journal of Electricity, Power and Gas*, xxxiv, 526-529 (1915).  
A highly technical study of cost factors and the development of a rate system based thereon; with formulae.

GORDON, J. B. An equitable sliding scale for rates of electric power. *Engineering News*, lxiii, 396-397 (1910).  
Includes formulae, tables and charts. Technical.

GRAMBS, W. J. Notes on rate making. *Journal of Electricity, Power and Gas*, xxv, 229-234 (1910).  
A good elementary discussion of principles; with charts and illustrative examples.

HALE, R. S. Price of electricity. *Electrical Review and Western Electrician*, lvi, 844-846, 896-898 (1910).

HANSON, A. C. Tariffs for electric motive power. *Electrical Review* (London), lx, 701-702 (1907).

HERRICK, C. L. Labor costs and load factor in central station practice. *Electrical Review and Western Electrician*, lix, 423-425 (1911).

HOADLEY, E. E. Tariff alterations. *Electrical Review* (London), lxiii, 395-396 (1908).  
The writer favors flat rates for electricity in connection with metal filament lamps.

HOAG, S. A. A system of rates for electric light and power and its application. *Journal of Electricity, Power and Gas*, xxv, 274-279 (1910).  
Discusses various forms of electric rates; non-technical.

IVES, A. S. Factors in rate making. *Electrical World*, lxv, 655-657, 783-786, 987-989 (1915).  
An excellent and comprehensive discussion of various forms of rates and the influence of different factors on costs. Semi-technical, including tables and suggested forms.

JACKSON, H. D. Discrimination in rates for electricity. *Power*, xxxix, 462-463 (1914).  
An interesting discussion of the relation between light and power charges, the writer maintaining that the small lighting consumer is discriminated against. Includes one chart; non-technical.

— Rates for electricity. *Engineering Magazine*, xliv, 326-334 (1912).  
A plea for lower lighting rates for the small consumer, based upon alleged inequity of low wholesale rates. With charts; non-technical.

— Theories of electric current rate schedules. *Engineering Magazine*, xlviii, 728-731 (1915).  
A discussion of the articles with the same title by H. W. Ashley and C. S. Reid, the writer defending Ashley's position.

KENNARD, E. G. Comparative costs of gas and electric lighting. *Electrical Engineer*, new series, xxxix, 540-542, 573-576, 612-615 (1907).  
A thorough and highly technical study, with many charts and tables.

KENNEDY, S. M. Justification of deviations in rates for electric service. *Public Service*, xiv, 13-14, 22 (1913).

KIEFER, P. J. Central station rate making. *Power*, xlvi, 268-270 (1905).  
Analysis of costs and rate making principles, with an illustrative example; semi-technical.

KNOWLTON, H. S. Labor costs in central stations. *Engineering Magazine*, xxxvii, 948-954 (1909).

An analysis of the working results of nine plants; includes tables and a chart.

LACKIE, W. W. Tariffs for electrical energy, with particular reference to domestic tariffs. *Journal of the Institution of Electrical Engineers*, xlix, 147-158 (1912).

Technical; theoretical.

LAWLER, J. C. A schedule of rates involving the investment cost of reaching the consumer. *Electrical World*, lvii, 1562-1565 (1911).

LEE, C. W. Free signs and flat rates. *Proc., National Electric Light Association*, 1905: vol. i, 351-358.

Discussion: pp. 355-366. A very good discussion of rates for commercial lighting to secure new business.

LINCOLN, P. M. Rates and rate making. *Trans., American Institute of Electrical Engineers*, xxxiv, 2279-2318 (1915).

Discussion: pp. 2319-2360. Includes an account of the necessity for recognizing load factor. Largely a description of various measuring devices.

LLOYD, E. W., HOWLETT, C. A. S., and WARING, J. M. S. Relation of load factor to power costs. *Journal of the Western Society of Engineers*, xiv, 241-250 (1909).

Discussion: pp. 241-250. Technical, with charts.

MACPHERSON, H. H. Rates and the use of rates. *Electrical World*, lii, 746-747 (1908).

On the use of flat rates for gas and electricity.

MARKS, W. D. The cost of electricity. *Electrical World*, lvi, 265-269 (1910).

Supplementary to his "The price of electricity."

— The price of electricity. *Electrical World*, liv, 555-559 (1909).

An interesting technical argument for the use of the Marks sliding scale; includes tables and charts of Massachusetts experience, and formulae.

NASH, L. R. Demand electric rates as affected by commission regulation. *Stone and Webster Public Service Journal*, xv, 432-437 (1914).  
Lists, by states, the leading commission cases on the subject with brief résumés.

— Some commercial considerations in central station rate making. Boston, 1915. 14 pp.  
Non-technical.

NICHOLAS, FREDERIC. Tendencies in central station rate making. *Electrical World*, lxvi, 907-909 (1915).  
Account of an interview with W. W. Freeman.

NORSA, RENZO. Diversity factor and fixed charges. *Electrical Review and Western Electrician*, lix, 1281-1285 (1911).  
A very good, semi-technical study.

NORTON, W. J. Approval of demand rates by public service commissions. *Electrical Review and Western Electrician*, lxv, 960-961 (1914).  
States briefly the attitude of the commissions in various states.

— The form of electric rates. *Electrical World*, lxiv, 20 (1914).

PALMER, RAY. Municipal lighting rates. *Annals of the American Academy of Political and Social Science*, lvii, 33-44 (1915).  
Discussion of how to compare electric lighting rates of different cities; includes tables of electric rates in Chicago, with some discussion.

— Street lighting rates and cost factors. *American City*, xi, 462-466 (1914).  
Abstract of his "Municipal lighting rates."

PERRY, F. B. A method for determining rates and prices for electric power. *Trans., American Society of Mechanical Engineers*, xxv, 120-133 (1903).  
A very technical discussion of step rates with suggested improvements in power rates. Includes formulae, charts and illustrative examples.

POLAKOV, W. N. Cost of electricity. *Utilities Magazine*, i, no. 8, 5-9 (1916).  
An analysis and classification of cost factors; with charts.

REED, W. E. The cost of arc lighting and general service from medium and small municipal or private plants. *Trans., American Institute of Electrical Engineers*, xxx, 1121-1133 (1911).

A technical analytical comparison of costs and rates.

REID, C. S. Theories of electric current rate schedules. *Engineering Magazine*, xlviii, 392-395 (1914).

A reply to H. W. Ashley, "Theories of electric current rate schedules." See also H. D. Jackson, "Theories of electric current rate schedules."

RIDER, J. H. Charges for supply from combined lighting and traction stations. *Electrical Engineer*, new series, xxxvi, 24-26 (1905).

An analysis of costs, with tables of rates charged in various English cities.

ROBERTS, J. L. Charges for electrical energy. *Electrical World*, lii, 747-749 (1908).

On the "rating" of various consumers; elementary but good.

RUSSELL, S. A. Electric power supply tariffs. *Electrical Review* (London), lxiv, 157-158 (1909).

A discussion of principles, with illustrative examples.

RYAN, W. T. Systems of charging for electrical energy. *Engineering Magazine*, xxxvii, 47-54 (1909).

An elementary comparison of nine different systems.

SCHARFF, M. R. "Low rates to large users." *Stone and Webster Journal*, xviii, 481-484 (1916).

SEABROOK, A. H. An English central station rate system. *Electrical World*, liv, 919-921 (1909).

A proposed schedule of electric rates for the Borough of St. Marylebone, with suggested tables of rates and discussion.

SEMENZA, GUIDO. Methods of charging for electric motive power. *Proc., National Electric Light Association*, 1907: vol. i, 520-532.

On the methods in use in Italy; technical, with formulae and charts.

SHARP, E. E. Equity *vs.* expediency: a tariff question. *Electrical Review* (London), lxiv, 698-699 (1909).

The writer opposes demand rates and favors two-flat-rate systems.

SHAWFIELD, C. E. C. Cheap power supply by municipalities. *Electrical Engineer*, new series, xxxix, 899 (1907). On electric power rates; semi-technical, with charts.

SHUSTER, T. W. Rates and methods of charging. *American Gas Light Journal*, lxxviii, 211 (1903). An outline of the various forms of electric rates.

SINCLAIR, ALEXANDER. Load factor: its effect upon an electricity station. *Electrician*, lv, 411-414 (1905). Technical, with charts and tables.

SINES, H. S. The effect of central station rates on new business. *Electrical Review and Western Electrician*, lx, 843-845 (1912). A good, semi-technical discussion; with load curves.

SNELL, J. F. C. Cost of electrical power for industrial purposes. *Electrical Review* (London), lxii, 155-158 (1908). Discussion: pp. 158-159, 201-203. Abstract.

SPENCER, C. J. The determination of central station rates. *Electrical World and Engineer*, xl, 813 (1902). Discussion of several systems of rates; includes one chart. Very brief and elementary, but good.

SPOHRER, H. H. Electric rates. *Electrical Review and Western Electrician*, lx, 747-748 (1912). On a new schedule of electric rates adopted by the Union electric light and power company of St. Louis, with some discussion; technical.

STORER, S. B. The sale and measurement of electric power. *Street Railway Journal*, xxvii, 1018-1023 (1906). Technical, with charts.

SWOBODA, H. O. An analysis of electric cooking. *Electrical Review and Western Electrician*, lxix, 670-675 (1916). Comprehensive discussion, including analysis of costs and extensive tables relating to the rates charged by companies all over the United States.

TOPPIN, W. A. Supply by meter, or contract? *Electrical Review* (London), lxiv, 403-404 (1909). A good elementary discussion of controlled flat rates versus meter rates for the small consumer.

TOPPIN, W. A. Systems of charging for electricity supply. *Electrical Engineer*, new series, xxxix, 42-44 (1907).  
A discussion of various kinds of rates, with an outline of a suggested form.

TWEEDY, E. F. Central station's load factors. *Electrical World*, lxi, 258-260 (1912).  
On the desirability of various kinds of loads; with a table and two charts.

VESEY-BROWN, C. S. Electric power tariffs. *Cassier's Magazine*, xxxii, 304-311 (1907).  
A technical study, with tables and illustrative examples.

WALLIS, L. R. The foresee (4-c) system of charging. *Proc., National Electric Light Association*, 1901: 34-50.  
Discussion: pp. 50-51. A good discussion of electric rates, with special attention to the "foresee" (capacity charge and current charge) system. Includes illustrative table and charts.  
For a reply, see Arthur Wright, "Central station tariff system."

WATKINS, G. P. Electrical rates: the load factor and the density factor. *Quarterly Journal of Economics*, xxx, 519-545 (1916).  
An excellent semi-technical study; with charts.

WHITEHORNE, E. E. The value of the poor man's business. *Electrical World*, lxvii, 201-203 (1916).  
Popular account of the use of controlled flat rates in various cities; illustrated with photographs.

WILCOX, N. T. Some reasons for differences in price for different services. *Proc., National Electric Light Association*, 1911: vol. i, 325-328.  
Semi-technical.  
— Wholesale rates for central station service. *Stone and Webster Public Service Journal*, iv, 241-243 (1909).

WRIGHT, ARTHUR. Central station tariff system. *Electrical World and Engineer*, xxxviii, 60-61 (1901).  
A reply to L. R. Wallis, "The foresee (4-c) system of charging."

WRIGHT, ARTHUR. Some principles underlying the profitable sale of electricity. *Electrician*, xlviii, 347-350, 378-382, 430-433 (1901-1902).

Paper before Institution of electrical engineers.

A thorough, technical discussion of various forms of electric rates, with tables and charts. The writer strongly favors the maximum demand method.

For a reply, see W. B. Esson, "Principles and profits in electrical supply."

#### GAS

BULLARD, J. E. Gas rates: flat rate unfair to company and consumer. *American Gas Light Journal*, ci, 337-339 (1914).

A very good discussion of various kinds of rates, with tables and charts; semi-technical.

CLARK, J. M. Rates for public utilities. *American Economic Review*, i, 473-487 (1911).

An interesting argument for the use of more scientific rate schedules for gas and telephone service.

CORY, C. L. Rate fixing and appraisal. *Journal of Electricity, Power and Gas*, xxix, 382-383, 407-409, 433-434, 463-465 (1912).

Paper before Pacific coast gas association.

On some of the principles of gas rate making; includes a practical example and tables.

For a reply, see A. C. Humphreys, "Public service rate making."

— Reasonable gas rates and their determination. *Progressive Age*, xxx, 964-968 (1912).

Paper before Pacific coast gas association.

DEFRESE, S. E. Equitable gas rates. *American Gas Light Journal*, c, 353-355 (1914).

DICKERMAN, J. C. The cost of producing illuminating gas in American cities, exclusive of returns to capital invested. *Utilities Magazine*, i, no. 1, 10-12 (1915).

A table of statistics from 19 cities, and discussion.

— The cost of supplying illuminating gas in the smaller American cities, exclusive of returns to capital invested. *Utilities Magazine*, i, no. 2, 19-23 (1915).

A table of statistics from 74 cities, and discussion.

Supplementary to his "Cost of producing illuminating gas in American cities, exclusive of returns to capital invested."

**DOHERTY, H. L.** Rates. Proc., National Commercial Gas Association, 1910: 297-318.

Discussion: pp. 319-331. An excellent account of the need for more scientific gas rates and discussion of cost factors.

**GARDINER, W. H., JR.** The making of rates. Progressive Age, xxiv, 381-383 (1906).

**HUMPHREYS, A. C.** Public service rate making. American Gas Light Journal, xcix, 209-214 (1913).

Abstract. A discussion of C. L. Cory, "Reasonable gas rates and their determination."

— — — Journal of Electricity, Power and Gas, xxxi, 367-370 (1913).

Discussion: pp. 371-374. Paper before Pacific coast gas association. A discussion of C. L. Cory, "Reasonable gas rates and their determination."

**KENNARD, E. G.** Comparative costs of gas and electric lighting. Electrical Engineer, new series, xxxix, 540-542, 573-576, 612-615 (1907).

A thorough and highly technical study, with many charts and tables.

**LEA, H. I.** Elements of gas rate making. Gas Age, xxxiii, 569-570 (1914).

Includes a tabular "analysis of gas sales to general consumer."

— Gas rate making. American Gas Light Journal, c, 385-387 (1914).

A good, elementary discussion, with a table and illustrative examples.

**MACPHERSON, H. H.** Rates and the use of rates. Electrical World, lii, 746-747 (1908).

On the use of flat rates for gas and electricity.

**MILLER, A. S.** Gas rates. Proc., American Gas Institute, viii, part I, 195-201 (1913).

Discussion: pp. 202-211. A brief and somewhat elementary analysis of cost elements, and a plea for more equitable forms of rates.

**MILLER, T. D.** The flat rate nuisance. American Gas Light Journal, lxxvi, 690 (1902).

WOLFF, S. E. Rates for industrial purposes. *American Gas Light Journal*, xcii, 807-809 (1910).

A good elementary discussion of various forms of gas rates, with illustrative examples.

#### TRACTION

American Electric Railway Association. Report of the committee on determining the proper basis for rates and fares.

*Proc., American Electric Railway Association*, 1911: 280.

Memoranda by: F. R. Ford, 281-295; C. S. Sergeant, 296-297; W. J. Clark, 297-299; H. G. Bradlee, 300-304; E. E. Foster, 305-309.

A very good discussion of various phases of the problem.

— — — *Proc., American Electric Railway Association*, 1912: 245-246.

Memoranda by: C. N. Duffy, 246-268; H. G. Bradlee, 269-276; F. R. Ford, 277-294.

A very excellent study.

— — — *Aera*, i, 375 (1912).

Memoranda by: C. N. Duffy, 376-391; H. G. Bradlee, 392-399; F. R. Ford, 400-414.

— — — *Aera*, i, 654-655 (1913).

Memoranda by: C. N. Duffy, 655-658; W. J. Clark, 658-664.  
Discussion: pp. 664-672.

BLAKE, H. W. The problem of the five cent fare. *Electric Railway Journal*, xxxvi, 23-27 (1910).

On the need for higher fares in New York state; with tables and one chart.

— — — *Electric Traction Weekly*, vi, 730-734 (1910).

BRADLEE, H. G. Actual figures of existing street railways. *Proc., American Electric Railway Association*, 1912: 269-276.

Memorandum with "Report of the committee on determining the proper basis for rates and fares."

An excellent analysis of costs and operation results, with tables of statistics.

— — — *Aera*, i, 392-399 (1912).

Abstract.

— — — *Electric Railway Journal*, xl, 1106-1108 (1912).

Abstract.

BRADLEE, H. G. The profitable limit of a five cent fare. Stone and Webster Public Service Journal, xi, 389-398 (1912).  
Paper before American electric railway association, entitled "Actual figures of existing street railways."

— Profitable limit of a five cent street railway fare. Engineering News, lxix, 214-215 (1913).  
Extracts.

COBURN, F. W. The crisis in street railway service. Public Service, vi, 101-104 (1909).  
On the need for higher fares.

CONWAY, THOMAS, JR. The decreasing financial returns upon urban street railway properties. Annals of the American Academy of Political and Social Science, xxxvii, 14-30 (1911).  
Good, non-technical discussion; includes tables of data.

DAVIS, G. H. Adjustment of American street car fares. Public Service, xi, 53-55 (1911).  
Abstract.

— The adjustment of American street railway rates to the expansion of city areas. Electric Railway Journal, xxxvii, 210-214 (1911).  
Abstract. Includes a number of tables.

DOOLITTLE, F. W. Some problems of electric railway industry. Electric Railway Journal, xlvii, 1035-1038 (1916).  
Considers the effect on the business of changes in fares and costs.

— Studies in the cost of urban transportation service. New York, 1916. 467 pp.  
A study made for the Bureau of fare research of the American electric railway association.  
An excellent technical work on the factors affecting cost of service and rate of fare on street railways.

DUFFY, C. N. The effect of load factor on cost of electric railway passenger service. Aera, i, 655-658 (1913).  
Technical.

— — — Electric Railway Journal, xli, 195-196 (1913).  
Abstract.

DUFFY, C. N. A theoretical basis for determining fares on properties having annual gross earnings of from \$100,000 to \$5,000,000. Proc., American Electric Railway Association, 1912: 246-268.

Memorandum with "Report of the committee on determining the proper basis for rates and fares."

A thorough analysis of traction costs and fares; with a hypothetical example and tables.

— — — Aera, i, 376-391 (1912).

Abstract.

— — — Electric Railway Journal, xl, 1103-1106 (1912).

Abstract.

DURAND, E. D. Street railway fares in the United States. American Monthly Review of Reviews, xxxi, 171-176 (1905).

A plea for lower fares in large cities; popular.

Answered by H. S. Knowlton in "Street railway fares in large cities."

EBERLE, GEORGE. Copper zone *vs.* nickel zone as a basis of interurban rates. Electric Railway Journal, xl, 451-456 (1912).

FORD, F. R. Passenger rates and fares in cities with surface street railways and elevated railroads or subways. Proc., American Electric Railway Association, 1912: 277-294.

Memorandum with "Report of the committee on determining the proper basis for rates and fares."

A valuable study, by cities, with tables of statistics.

— — — Aera, i, 400-409 (1912).

Abstract.

— — — Electric Railway Journal, xl, 1108-1112 (1912).

Abstract.

FULLERTON, IRWIN. Do low fares increase riding? Electric Railway Journal, xlivi, 770 (1914).

Brief account of the results of a fare reduction experiment made by the Detroit United Railway Company.

GRUHL, EDWIN. The cost of carrying a passenger and the proposed work of the Bureau of Fare Research. Proc., American Electric Railway Accountants' Association, 1913: 270-273.

HANSON, A. C. Tariffs for electric motive power. Electrical Review (London), lx, 701-702 (1907).

A very popular discussion of various rates.

HILD, F. W. Effect of rate of fare on riding habit. *Electric Railway Journal*, xliii, 229-233 (1914).

A thorough study of the problem, with data and charts, purporting to prove that the effect of the rate of fare is practically negligible.

— Rate of fare and riding habit. *Aera*, ii, 806-819 (1914).

A good study, with charts and data as to the results in various cities. The writer concludes that fares should not be reduced except through the operation of natural forces.

KNOWLTON, H. S. Street railway fares in large cities. *American Monthly Review of Reviews*, xxxii, 80-84 (1905).

An argument against lower fares. Reply to E. F. Durand, "Street railway fares in the United States."

NASH, L. R. Financial problems of electric railways. *Stone and Webster Journal*, xviii, 441-456 (1916).

Discusses in elementary form traction operating costs, revenue and fares.

RICHEY, A. S. Cost of rush hour service. *Aera*, ii, 218-222 (1913).

A good, technical analysis, with charts.

RIDER, J. H. Charges for supply from combined lighting and traction stations. *Electrical Engineer*, new series, xxxvi, 24-26 (1905).

An analysis of costs, with tables of rates charged in various English cities.

SEELY, C. T. Collection of fares under a zone system. *Aera*, i, 428-430 (1912).

On the results of a study of methods of checking origin and end of ride made by the South side elevated railroad in Chicago.

STEARNS, R. B. Zone system of fares in practice. *Electric Railway Journal*, xlv, 836-838 (1915).

A good analysis of the results of six months' operation in Milwaukee; illustrated with two charts.

STEBBINS, THEODORE. Interurban railway fares. *Proc., American Street and Interurban Railway Association*, 1907: 260-270.

An analysis of the effect of different local conditions on the rate of fare.

WATKINS, G. P. Street railway rates, with especial reference to differentiation. *Quarterly Journal of Economics*, xxv, 623-649 (1911).

An excellent discussion of the underlying economic principles and their application.

YERBURY, H. E. Equitable charges for tramway supply. *Journal of the Institution of Electrical Engineers*, xliv, 576-600 (1910).

Discussion: pp. 606-663. Includes rate elements, tables of rates charged in Great Britain and charts.

— — — *Tramway and Railway World*, xxvii, 108-111 (1910).

Discussion: pp. 111-112. Abstract.

#### WATER

ALVORD, J. W. Equitable hydrant rentals and better methods for apportioning fire protection cost. *Journal of the American Waterworks Association*, i, 95-102 (1914).

A good discussion.

BASSETT, G. B. Water meter rates. *Proc., American Waterworks Association*, xxviii, 619-627 (1908).

Technical, with illustrative examples.

BEMIS, E. W. Water meter rates. *Engineering Record*, xiii, 514-515 (1911).

An elementary discussion of flat and meter rates.

BROWN, C. C. Water rates and rentals. *Municipal Engineering*, xxxv, 73-78 (1909).

BURGESS, PHILIP. Water rates. *Proc., Central States Waterworks Association*, 1912: 113-117.

A brief discussion of rates and costs.

DAVIS, F. A. W. "Shall there be a charge for fire lines by water departments and water companies, and shall meters be placed on fire lines?" *Proc., American Waterworks Association*, xxiii, 362-367 (1903).

EARL, G. G. Water rates. *Proc., American Waterworks Association*, xxxi, 173-189 (1911).

Discussion: pp. 189-216. A somewhat elementary discussion of principles, with an analysis of rates for New Orleans as illustration.

ERICSON, JOHN. Waterworks plants and the proper rates for domestic and public service. Proc., American Waterworks Association, xxvii, 295-302 (1907).

FULLER, G. W. Elements to be considered in fixing water rates. Annals of the American Academy of Political and Social Science, liii, 251-261 (1914).  
A popular analysis of cost and income elements.

JORDAN, F. C. Making rates for water service. Public Service, xi, 83-85 (1911).  
— Rate making. Municipal Engineering, xl, 319-322 (1911).

KIMBALL, F. C. The equity of a minimum charge for metered service. Proc., American Waterworks Association, xxiv, 268-276 (1904).  
Discussion: pp. 277-280. A good, somewhat elementary discussion.

KNOWLES, MORRIS. Equitable water rates the result of metering. American City, viii, 172-177 (1913).  
—, and SCHARFF, M. R. The relation of "out-of-pocket cost" to water rate making, with an illustrative example. Engineering and Contracting, xli, 336-338 (1914).

LEDOUX, J. W. Water rates and extensions. Proc., American Waterworks Association, xxx, 193-198 (1910).  
A brief discussion of fundamental principles; semi-technical.

MATHEWS, G. C. Wisconsin water rates. Public Service Regulation, i, 33-35 (1912).  
Discussion of the methods and procedure used.

MAURY, D. H. Rates for water service. Proc., American Waterworks Association, xxvii, 33-39 (1907).  
Elementary.  
— — Engineering News, lvii, 709-710 (1907).  
Abstract.  
— — Public Service, vi, 127-128 (1909).

METCALF, LEONARD. Depreciation in waterworks operation. Public Service, x, 82-84, 119-121 (1911).  
On depreciation in relation to rate making, and the importance of fixing rates high enough to include depreciation.

METCALF, LEONARD. Private fire protection service charges. Proc., American Waterworks Association, xxxiii, 127-152 (1913).

Discussion: pp. 158-190. An account of an investigation supplementing Metcalf, Kuichling and Hawley, "Some fundamental considerations in the determination of a reasonable return for public fire hydrant service."

—, KUICHLING, E., and HAWLEY, W. C. Some fundamental considerations in the determination of a reasonable return for public fire hydrant service. Proc., American Waterworks Association, xxxi, 55-117 (1911).

A highly technical study, with formulae, tables and charts. Includes tables of the rates charged in different cities.

MILLER, J. T. Fire protection: what is the proper basis for charges? Proc., American Waterworks Association, xxvi, 397-400 (1906).

NOURSE, H. O. Water rates. Proc., American Waterworks Association, xxiii, 143-154 (1903).

PATTON, W. A. At what rate can water be profitably sold when pumped against a 300-foot head? Proc., American Waterworks Association, xxiv, 490-496 (1904).

A discussion of the rates in various places.

RICHARDS, W. H. Meter rates. Journal of the New England Waterworks Association, xxii, 289-294 (1908).

Discussion: pp. 294-309. A brief argument for the use of meter rates for water, with a table and chart.

ROSAMOND, S. J. What would be a fair basis for fixing water rates for fire and domestic service? Proc., American Waterworks Association, xxv, 132-138 (1905).

Discussion: pp. 139-150. An analysis of the rates of seventy cities; with large comparative tables of statistics.

WAGNER, B. M. Rates for water supply. Journal of the New England Waterworks Association, xxix, 1-48 (1915).

A very good article, including an account of water rate history and a discussion of the various forms of rates; with tables.

## RATE OF RETURN

Aera. Topical discussion on rate of return on electric railway capital. Aera, iv, 711-739 (1916).

Subject divided into its various elements. J. D. Mortimer.

Actual returns in the past. D. J. McGrath.

Returns necessary to attract new capital. O. B. Willcox.

Limitations of maximum earning capacity. M. C. Brush.

Uncertainty of valuation. T. C. Williams.

An interesting symposium.

ALLISON, J. E. Rate of return. Annals of the American Academy of Political and Social Science, liii, 172-177 (1914).

Good elementary discussion.

— — — Stone and Webster Public Service Journal, xvi, 277-289 (1915).

An amplified reprint of article by same title in Annals of the American Academy of Political and Social Science.

ALVORD, J. W. The financial questions in waterworks valuations. Proc., American Waterworks Association, xxii, 142-152 (1902).

A brief discussion of intangible values, franchise value and rate of return.

— — — Engineering Record, xliv, 30-32 (1902).

Abstract.

BEALE, J. H., and WYMAN, BRUCE. Rate of return. (*In Railroad rate regulation.* 2d edition. New York, 1915.) 250-283.

A very good legal discussion of rate of return to railroads, of interest for all public utilities; thoroughly annotated.

BLUE, F. K. The regulation of public utilities by competition in the securities market. Journal of Electricity, Power and Gas, xxxv, 39-41, 63-65 (1915).

Technical, with formulae and tables.

CLARK, J. M. Some neglected phases of rate regulation. American Economic Review, iv, 565-574 (1914).

A somewhat academic, economic discussion of (1) fluctuating prices and the earnings of capital, (2) surplus accumulated out of earnings, and (3) betterments and public necessity.

CORY, C. L. Rate fixing and appraisal. *Journal of Electricity, Power and Gas*, xxix, 382-383, 407-409, 433-434, 463-465 (1912).

Includes a brief discussion of the elements of risk and rate of return.

CROSBY, O. T. Automatic rate regulation. *Proc., American Electric Railway Association*, 1912: 307-320.

Interesting plea for more definiteness in the rate of return to be allowed new enterprises by commissions.

DUNN, S. O. Shall railway profits be limited? *Journal of Political Economy*, xviii, 593-609 (1910).

An attempt to prove that rates and profits do not vary together. Discusses railroads only, but is of some general interest.

ERICKSON, HALFORD. Regulation and reasonable returns. *Electrical Review and Western Electrician*, lxiv, 1296-1300 (1914). Abstract.

— — — *Electrical World*, lxiii, 1477-1479 (1914).

— — What should a company earn? *Public Service*, xviii, 17-19 (1915).

An excellent popular article on the elements of rate of return; theoretical, with practical application.

FOREST, H. V. Profits in the lighting business. *Progressive Age*, xxvi, 649-651 (1908).

Discussion of whether profits from electric lighting have been overestimated; with tables of statistics.

FOSTER, H. A. Capitalization. (*In Engineering valuation of public utilities and factories*. New York, 1912.) 252-258.

Discusses chiefly the rate of return allowed on the capitalization; with quotations from articles and decisions.

GILLETTE, H. P. The valuation of waterworks properties. X. The Rate of "fair return." *Engineering and Contracting*, xlv, 99-100 (1916).

A good discussion.

— — Valuations of public service properties. *Public Service*, x, 114-116 (1911).

Emphasizes the importance of development expense in determining the fair rate of return.

HAYES, H. V. Fair rate of return. (*In Public utilities: their fair present value and return.* New York, 1915.) 81-96.  
A very good, non-technical discussion.

— The worth of service to the consumer. (*In Public utilities: their cost new and depreciation.* New York, 1913.) 125-132.  
A brief discussion of rate of return, with quotations from decisions.

HOLMES, F. L. Rate of return. (*In Regulation of railroads and public utilities in Wisconsin.* New York, 1915.) 43-56.  
Treats chiefly of the attitude of the Wisconsin commission, but is a good elementary discussion of the subject.

LEWIS, H. T. Interest and profits in rate regulation: the practice of the Wisconsin railroad commission. *Political Science Quarterly*, xxvii, 239-259 (1912).  
A good analysis, with many quotations from cases before the commission.

McFALL, R. J. Railway monopoly and rate regulation. *Columbia University Studies in History, Economics and Public Law*, lxix, 1-223 (1916).  
Ch. iii. The fair return.  
Considers railroads only, but chapter iii is of some general interest.

MCGRATH, D. J. Actual returns in the past. *Aera*, iv, 714-722 (1915).  
*In* Topical discussion on rate of return on electric railway capital. History in Massachusetts, with diagrams. An interesting study.

— Return on Massachusetts investment. *Electric Railway Journal*, xlvii, 256-259 (1916).  
Abstract.

MAYER, JOSEPH. The just value of monopolies and the regulation of the prices of their products. *Trans., American Society of Civil Engineers*, lxxv, 455-471 (1912).  
Discussion: pp. 472-502. Includes formulae for determination of profits. Relates chiefly to the rate of return. Theoretical.

MILLER, A. S. Regulation and utility financing. *Public Service*, xiii, 211-213 (1912).  
On the effect of a restricted rate of return upon capital.

MILLER, W. E. Ashland water rate decision explained. *Engineering Record*, lxxi, 805-807 (1915).  
On decisions of the Wisconsin commission refusing to accept 4 per cent. as an adequate return, and revising rates.

MORTIMER, J. D. Rate of return necessary to attract capital to electric railways. *Public Service*, xx, 83-84 (1916).  
An analysis of risk in the electric traction industry.

— Rate of return on railway capital. *Electric Railway Journal*, xlvi, 253-254 (1916).  
Abstract.

— Risk as an element of the rate of return on capital in electric traction properties. *Aera*, i, 759-763 (1913).  
A discussion of the different sources of risk.

— — — *Public Service*, xv, 41-42, 46 (1913).  
Reprint.

STERRETT, J. E. The comparative yield on trade and public service investment. *American Economic Review*, vi, 1-8 (1916).  
An interesting study.

WHITTEN, R. H. Rate of return. (*In Valuation of public service corporations*. New York, 1912-1914.) i and ii, ch. xxx.  
A very excellent discussion, with many quotations from court and commission decisions.

WILCOX, O. B. Competition with other investments. *Electric Railway Journal*, xlvi, 260-263 (1916).  
Abstract.

— Returns necessary to attract new capital. *Aera*, iv, 723-729 (1915).  
*In* Topical discussion on rate of return on electric railway capital. On the necessity of returns sufficient to attract new capital. Very general and popular.

WILSON, C. P. Financing public utilities under state control and service rate and rate of return. *Proc., Indiana Gas Association*, 1916: 35-39.  
Discussion: pp. 39-51. On valuation and rate of return. Considers 8 to 10 per cent fair.

WINSLOW, W. H. A study of the conditions affecting the price at which capital can be secured to develop public utilities. *Moody's Magazine*, vi, 174-178 (1908).  
Includes tables of the factors affecting the rate of return.

WINSLOW, W. H. What is fair return upon investment? *Progressive Age*, xxvii, 685-686 (1909).

A good, concise analysis of factors affecting the rate of return; with illustrative tables of the elements of risk and their effect on the rate of return.

— — — Public Service, vii, 5-7 (1909).

WOOLFOLK, W. G. Appraisal of public utility properties. *Canadian Engineer*, xxviii, 629-632 (1915).

Includes a brief discussion of the rate of return.

YOUNG, C. G. Logical basis for valuations of interurban street railways. *Electrical Review and Western Electrician*, lviii, 180-181, 231-237 (1911).

Long abstract of paper before Central electric railway association. Includes a very good discussion of rate of return.

— — — *Electric Railway Journal*, xxxvii, 115-118 (1911).  
Abstract.

— — — *Electric Traction Weekly*, vii, 67-71 (1911).  
Abstract.

— — — *Engineering News*, lxv, 141-143 (1911).  
Abstract.

— — — New York, 1911. 32 pp.

Reprint of paper before Central electric railway association.

### THE SLIDING SCALE

ALLEN, W. S. The gas supply and the public. *Municipal Affairs*, vi, 656-667 (1902).

A general discussion of municipal ownership, the writer advocating the sliding scale as preferable to municipalization.

BLUE, F. K. The practical application of the self-adjusting standard for rate fixing. *Journal of Electricity, Power and Gas*, xxx, 386-389, 403-404 (1913).

Supplementary to his "The public and public service corporations." Technical, with a table and illustrative examples.

— — — The public and public service corporations. *Journal of Electricity, Power and Gas*, xxix, 483-484 (1912).

Outlines a proposed method of automatically controlling rate level and rate of return.

BLUE, F. K. Rate fixing and appraisals: automatically directed method of rate fixing and price control. *Journal of Electricity, Power and Gas*, xxix, 500-501 (1912).  
Supplementary to his "The public and public service corporations."

BRANDEIS, L. D. How Boston solved the gas problem. *American Review of Reviews*, xxxvi, 594-598 (1907).  
On the application of the sliding scale to the Boston gas companies.

FORSTALL, A. E. Brief history of gas legislation in Great Britain and extracts from acts applying the sliding scale and auction clauses. *Proc., American Gas Institute*, iv, 702-713 (1909).  
Appendix to "'Sliding scale' regulations of prices and rates of dividend for gas companies."  
— "Sliding scale" regulation of prices and rates of dividend for gas companies. *Proc., American Gas Institute*, iv, 225-236 (1909).  
Discussion: pp. 236-241. A good general discussion of the subject.  
— — — *American Gas Light Journal*, xcii, 156-157 (1910).  
Discussion: pp. 196-197. Abstract.

GARDINER, W. H., JR. The London sliding scale as a method for the government regulation of public service corporations. ?  
? 133 pp.

GASELL, G. A. Sliding scale gas rates. *Public Service Regulation*, i, 396-398 (1912).  
A popular discussion of the sliding scale as applied in Boston and Great Britain, the writer favoring its use.

MARKS, W. D. The London sliding scale. (*In* Practical rate making and appraisement. South Hadley, 1914 ?) 227-251.  
A detailed description and discussion. Semi-technical, with formulae.

Massachusetts Legislature. The London sliding scale of prices and dividends as applied to gas companies. Boston, 1906.  
85 pp.  
Report of a special committee to the Massachusetts legislature.

MATTHEWS, NATHAN. Report on the London sliding scale. (*In* Gardiner, W. H., Jr. The London sliding scale as a method for the government regulation of public service corporations. ?, ?) 23-118.

PETERS, J. W. S. A suggested sliding scale of dividends for street railways, determined by quality of service. *National Municipal Review*, ii, 31-38 (1913).

Very interesting and novel; includes illustrative tables.

WHITTEN, R. H. Regulation of public service companies in Great Britain: with supplemental chapters on the Boston sliding scale and Toronto auction sale and maximum dividend plans. New York, 1914. 231 pp.

Reprinted from 1913 annual report of Public service commission for the first district, New York. An excellent study of the sliding scale.

WILCOX, D. F. Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities. New York, 1910-1911. 2 vols.

The sliding scale, Boston, i, pp. 57-58, 560-564.

WRIGHTINGTON, E. N. The sliding scale method of regulating public service corporations. Proc., National Conference for Good City Government, 1910: 103-108.

A brief, popular account of the sliding scale and its use by Boston gas companies.

— The sliding scale method of regulation as applied to gas companies in Massachusetts. (*In* KING, C. L. The regulation of municipal utilities. New York, 1912.) 99-102.

Revised reprint.

## VII. TAXATION

ADAMS, H. C. Tendencies in railway taxation. Proc., American Political Science Association, i, 224-232 (1904).  
Discussion: pp. 232-249. Considers chiefly intangibles in valuations for taxation.

ADAMS, T. S. Valuation of railway property for purposes of taxation. Journal of Political Economy, xxiii, 1-16 (1915).  
A discussion from the standpoint of Wisconsin practice and experience.  
Of some interest for all public utilities.

ALLEN, W. S. Taxes on street railway franchises. Forum, xxxii, 355-359 (1901).  
The writer believes that exemption of the companies from taxation and all unnecessary burdens, together with the requirement of low rates of fare, is the best policy for all concerned.

BALDWIN, W. W. Railroad taxation. Railway World, lii, 757-760 (1908).  
Abstract of paper before Minnesota academy of social science.

— Taxation of railroad property. Proc., Minnesota Academy of Social Science, i, 105-130 (1907).  
A good general analysis and discussion of interest for all public utilities.  
See also C. B. Miller, "Taxation of railroad property."

BULLOCK, C. J. Taxation of public utilities. Aera, ii, 1212-1219 (1914).

CAVANAUGH, H. B. The federal income tax law as applicable to electric railroad corporations. Electric Railway Journal xlvi, 1277-1278 (1913).  
A brief explanation of the law.

COLEMAN, G. S. Special franchise taxation in New York. State and Local Taxation, 1907: 649-654.

CONANT, W. B. Street railway obligations to repair and maintain public ways. Municipal Journal, xl, 509-510 (1916).

CROCKER, COURtenay. Some evils of double taxation. Public Service, ix, 152-154 (1910).

CURTIS, C. E. Taxation of street railways for purposes of revenue and control. *Yale Review*, viii, 173-201 (1899).

A good, technical study. Includes tables showing the practice in various cities of the United States and Canada.

DANIELS, W. M. Taxation of railroad and canal property in New Jersey. *Quarterly Journal of Economics*, xx, 617-622 (1906).

History; with discussion of a new law.

DEWEY, D. R. Legal aspects of corporation franchises. (*In* McLAUGHLIN, A. C., and HART, A. B. *Cyclopedia of American government*. New York, 1914.) ii, 45-48.

— Municipal revenue from street railways. *Publications, American Economic Association*, ii, 551-562 (1888).

*In* *The relation of modern municipalities to quasi-public works. An analysis of the kinds of revenue in various cities.*

EASTMAN, F. M. The taxation of public service corporations in Pennsylvania. Philadelphia, 1905. 46 pp.

An historical and critical account of state and local taxation, with quotations from decisions, tables, and an index.

ERICKSON, HALFORD. Regulation or profit-sharing? *Electric Railway Journal*, xlivi, 257-262 (1914).

EVANS, N. W. A history of taxation in Ohio: giving the legislation on the subject and a commentary on the methods of providing public revenues. Cincinnati, 1906. 220 pp.

Title on the cover, "Who pays your taxes?"

Ch. v. Railroad taxation.

xiv. Excise and franchise taxation.

FAY, C. N. The city gets fifty-five per cent. *Outlook*, xcii, 407-413 (1909).

A very popular account of the Chicago traction settlement, by which 55 per cent of gross earnings are paid to the city.

FAY, E. P. Assessment and collection of school taxes on property of public service corporations. *Proc., New York State Conference on Taxation*, 1916: 128-135.

FLETCHER, F. N. Should public utilities be assessed for taxation by public service commissions? Proc., National Tax Association, 1915: 104-111.

A good discussion. The writer believes that public utilities should be taxed to secure equity and that assessment by the commission is desirable.

FOOTE, A. R. Regulation and taxation of public service corporations. Municipal Affairs, vi, 749-764 (1902).

The writer believes that theoretically public utilities should be free from taxation, but that actually a tax on gross earnings is desirable. Considers that municipal plants should be taxed and regulated the same as private plants.

— Relation of franchise taxation to service rates. State and Local Taxation, 1907: 655-661.

An excellent study; the conclusion being that a gross earnings tax alone is advisable until people learn that a low tax, or none, is necessary for low public utility rates.

— Taxation of public service corporations. Proc., National Conference for Good City Government, 1907: 264-268.

— Taxation of railroads in the United States. State and Local Taxation, 1911: 192-230.

A thorough discussion of the taxation of all classes of public utilities; with tables.

FOSTER, H. A. Franchise. (*In* Engineering valuation of public utilities and factories. New York, 1912.) 236-251.

A good discussion of franchises and taxation, with many quotations from court and commission decisions.

FOSTER, ROGER. The taxation of the elevated railroads in the city of New York. New York, 1883. 61 pp.

Largely composed of quotations from reports and decisions.

FRIEDMAN, H. G. The taxation of corporations in Massachusetts. Columbia University Studies in History, Economics and Public Law, xxvii, 405-577 (1907).

"Taxation of public service corporations": pp. 502-535.

GARDINER, W. H. Public relations and taxation of public service corporations. State and Local Taxation, 1909: 175-180.

GARRISON, W. L. Establish principle and let methods evolve.  
Moody's Magazine, ii, 504-506 (1906).

*In* Municipal ownership and operation: symposium.  
Brief discussion, advocating single tax instead of municipal ownership.

GRUHL, EDWIN. Taxing the utilities. Public Service, xviii, 41-42, 50-51 (1915).  
A popular article opposing utility taxation as being ultimately paid by the consumer.

GUERNSEY, N. T. The relation of taxation to service rates.  
State and Local Taxation, 1912: 177-185.  
A good discussion. The writer believes in the taxation of public service corporations, and the inclusion of the taxes in the cost of service in rate regulation.

— — — Public Service, xiv, 216-218 (1913).

HALL, B. E. Administrative difficulties of the special franchise tax law. Proc., New York State Conference on Taxation, 1911: 177-184.  
On the difficulties under the New York law.

HANSEL, CHARLES. The valuation of railroads in New Jersey.  
Engineering Record, lxiii, 594-599 (1911).  
Discusses the valuation for taxation, with brief reference to the experience of other states. Of some interest for municipal utilities.

HOLCOMB, A. E. The assessment of public service corporations.  
State and Local Taxation, 1911: 149-192.  
Appendix: "Extracts from reports of tax commissions, writings of economists, and from other sources, upon the subject of the taxation of public service corporations by the gross earnings method, with notes on the constitutionality of such a method."  
A very good discussion of all phases of the question, emphasizing the need for administrative improvements.

— Public service corporation assessment. Public Service, xi, 115-117, 159-162 (1911).  
Abstract.

HOWE, F. C. Taxation of quasi-public corporations in the state of Ohio, and the franchise tax. Annals of the American Academy of Political and Social Science, xiv, 157-180 (1899).  
Treats chiefly of railroad taxation, but includes municipal utilities also.

HOWE, F. C. The taxation of railroads and other public service corporations. Proc., National Conference for Good City Government, 1907: 306-316.

A good, general discussion; popular.

JOHNSON, E. R. Railway taxation. (*In* American railway transportation. 2d revised edition. New York, 1909.) 408-419.

LOOMIS, H. B. Franchise taxation in Illinois. Municipal Affairs, v, 388-400 (1901).

A popular account, with tables.

MALTBY, M. R. Taxation of gas, electric supply and tramway undertakings in Great Britain. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 516-549.

— The taxation of public service corporations. State and Local Taxation, 1908: 477-486.

An interesting discussion of franchise taxation.

MILLER, C. B. Taxation of railroad property. Proc., Minnesota Academy of Social Science, i, 131-137 (1907).

Supplementary to W. W. Baldwin, "Taxation of railroad property."

MONTGOMERY, H. E. Government ownership unnecessary. Moody's Magazine, iv, 143-145 (1907).

Outlines of a suggested plan for regulating all public service corporations through state corporation departments and a graduated tax on net profits.

PLEHN, C. C. A suggestion for a measure of the burden of taxation on street railways. Proc., American Electric Railway Accountants' Association, 1915: 39-50.

Discussion: pp. 50-55.

— The taxation of franchises in California. National Municipal Review, i, 337-354 (1912).

A good historical and critical account.

— Taxation of public service corporations. State and Local Taxation, 1907: 635-648.

A good discussion of various bases of public utilities taxation.

POND, O. L. The taxation of corporations. *Yale Law Journal*, xxiv, 381-390 (1915).  
Taxation of public utilities: pp. 388-390.

ROWE, L. S. The possibilities and limitations of municipal control. *Annals of the American Academy of Political and Social Science*, 1900: supplement, 9-20.  
Shows that pecuniary return to the city should be subordinated to quality and cost of service.

SELIGMAN, E. R. A. Taxation of franchise values. *Municipal Affairs*, vi, 765-773 (1903).

SHIELDS, R. H. Railroad taxation problems. *State and Local Taxation*, 1910: 231-241.  
A good discussion of problems in Michigan, with suggested changes.  
Of interest for all public utilities.

— Railway taxation. *State and Local Taxation*, 1908: 263-269.  
Extracts from paper before Minnesota academy of social science.

— The taxation of corporate property as seen in the taxation of Michigan railroads. *Proc., Minnesota Academy of Social Science*, i, 40-58 (1907).  
An historical account, of some general interest.

SHORTT, ADAM. The taxation of public service corporations. *State and Local Taxation*, 1907: 622-634.  
On the basis to be used. The writer recommends taxation of earnings.

SNIDER, G. E. The taxation of the gross receipts of railways in Wisconsin. *Publications, American Economic Association*, 3d series, vii, 521-658 (1906).

TRIPP, G. E. Taxes and licenses. *Proc., American Street and Interurban Railway Association*, 1910: 274-283.  
On the methods of taxing street railways in use in various parts of the country.

U. S. Bureau of the Census. Street and electric railways, 1907. Washington, 1910. 575 pp.  
Municipal taxation methods: pp. 291-293.

U. S. Interstate Commerce Commission. Railways in the United States in 1902. Washington, 1903. 5 vols.

Pt. V. State taxation of railways and other transportation agencies. 462 pp.  
Appendix to sixteenth annual report.

VALON, ARTHUR. The rating of water undertakings. *Trans., Institution of Waterworks Engineers*, xvii, 95-105 (1912). Discussion: pp. 106-120.

WHITNEY, F. N. Centralized assessment of public utilities in New York. *Proc., New York State Conference on Taxation*, 1915: 191-201.

WHITTEN, R. H. Distinction between value for tax and rate purposes. *Proc., National Tax Association*, 1913: 342-350.

— Taxation of corporations in New York, Massachusetts, Pennsylvania and New Jersey. *New York State Library Bulletin*, no. 61: 617-810 (1901).  
Includes public service companies.

WILCOX, D. F. Fundamental planks in a public utility program. *Annals of the American Academy of Political and Social Science*, lvii, 8-19 (1915).  
Maintains that public utilities should not be a source of municipal profit through franchise taxation or compensation.  
— — — *American City*, xi, 480-485 (1914).  
Abstract.  
— Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities. New York, 1910-1911. 2 vols.  
Vol. ii, Ch. xxix. Street railway franchises granted for compensation.  
xliv. Compensation for franchises and taxation of public utility properties.  
A thorough discussion of franchise compensation and taxation, including an account of provisions actually in force.

— Principles as to franchise values. *Utilities Magazine*, i, no. 3, 59-67 (1916).  
A good elementary discussion of franchise values for taxation, rate making, condemnation, sale and capitalization.

WILCOX, D. F. Taxation of public utilities. *Annals of the American Academy of Political and Social Science*, lviii, 140-148 (1915).

An excellent discussion. The writer opposes taxation of public utilities under strict regulation, except as a weapon or to form an amortization fund, because the taxes would be paid in fact by the consumer.

WILLIAMS, HARRISON. Assessment of railroads and other public service corporations. *Proc., New York State Conference on Taxation*, 1911: 185-191.

A brief discussion of the laws in force in New York state and their results.

WRIGHTINGTON, S. R. Taxation of "guaranteed" stock in Massachusetts. *Green Bag*, xxiv, 8-17 (1912).

An account of an attempt of the Boston and Maine railroad to dodge bond taxation by issuing "guaranteed stock."

## VIII. HOLDING COMPANIES

FORD, F. R. The holding company: its advantages and disadvantages. *Electric Railway Journal*, xlivi, 23-27 (1914). A good analysis, with tables of statistics.

GOODRICH, J. P. The public welfare and the holding company. *Annals of the American Academy of Political and Social Science*, lvii, 323-334 (1915).

HOMER, F. T. Public advantages of holding companies. *Annals of the American Academy of Political and Social Science*, lvii, 313-322 (1915).

— The public, the investor and the holding company. (*In Y. M. C. A.*, New York, West Side Branch. *Public utility economics*. New York, 1914.) 11-30. A very good elementary discussion.

JENKINS, W. C. Public utility holding companies. *Public Service*, xvi, 149-152 (1914). A good popular account of their advantages.

LEE, E. B. The public utility movement: holding, financing and investment companies. *Moody's Magazine*, xiii, 375-378 (1912). Intended for the investor, but of general interest; elementary.

MATHEWSON, C. F. Holding companies and the public welfare. *Annals of the American Academy of Political and Social Science*, lvii, 305-312 (1915). Excellent general article, in favor of public utility holding companies.

MEAD, E. S. Holding companies. (*In McLAUGHLIN, A. C., and HART, A. B. Encyclopedia of American government*. New York, 1914.) ii, 124.

## IX. MUNICIPAL OWNERSHIP

### GENERAL WORKS

#### BOOKS

DARWIN, LEONARD. Municipal ownership: four lectures delivered at Harvard University, 1907. New York, 1907. 149 pp.

A very good discussion of both sides of the question.

— Municipal trade: the advantages and disadvantages resulting from the substitution of representative bodies for private proprietors in the management of industrial undertakings. New York, 1903. 464 pp.

An excellent analysis, with some discussion of results in Great Britain. Arguments both for and against municipalization are well presented, and the author's main conclusion is that reforms are needed "(1) to more effectually safeguard the consumer and the rate payer when monopolies are managed by private proprietors; (2) to check excessive municipal trading; and (3) to render municipal trade as little harmful as possible."

FOOTE, A. R. Cost of service to users and tax payers: the only proper basis for comparisons between private and municipal ownership of water, gas and electric lighting works. Cincinnati, 1897. 100 pp.

— Municipal public service industries. Chicago, 1899. 337 pp.

Powers of municipalities: pp. 89-207.

Cost of service to users and taxpayers: pp. 211-247.

KNOOP, DOUGLAS. Principles and methods of municipal trading. London, 1912. 409 pp.

A thorough critical and historical study. The author concludes that there are not sufficient facts available for a general decision, that municipal trading is in itself undesirable, but that in some cases it is preferable to abuses by private companies.

National Civic Federation. *Municipal and private operation of public utilities.* New York, 1907. 3 vols.

Pt. I, vol. i, General conclusions and reports.

General conclusions and report to the commission.

The American municipality. W. L. Fisher.

The British municipality. F. J. Goodnow.

The labor report. J. W. Sullivan.

Labor and politics. J. R. Commons.

Municipal operation *versus* private operation of municipal monopolies:

General introduction. Frank Parsons.

American conditions. E. W. Bemis.

Gas and electricity in Great Britain. M. R. Maltbie.

British tramways. Frank Parsons.

Analysis and interpretation of the information concerning the municipal ownership of public utilities. C. L. Edgar and Walton Clark.

British tramways. W. J. Clark.

Pt. II, vol. i, Reports of experts: United States.

I. Waterworks.

General history and legislation. J. H. Gray.

Labor and politics. J. W. Sullivan and J. R. Commons.

Engineering matters. D. H. Maury.

Finance and accounting. Marwick, Mitchell & Co.

II. Gas Works.

General history and legislation. J. H. Gray.

Labor and politics. J. R. Commons and J. W. Sullivan.

Engineering matters. Frederick Burdett and A. E. Forstall.

Finance and accounting. Marwick, Mitchell & Co.

The relation of the city of Philadelphia to the gas supply. L. S. Rowe.

III. Electricity supply.

General history and legislation. William Hard and J. H. Gray.

Labor and politics. J. W. Sullivan and J. R. Commons.

Engineering matters. Theodore Stebbins and C. E. Phelps, Jr.

Finance and accounting. Marwick, Mitchell & Co.

Supplement.

Labor and politics. J. R. Commons and J. W. Sullivan.

IV. Massachusetts electricity works. A. D. Adams and Charles Prichard.

Pt. II, vol. ii, Reports of experts: United Kingdom.

I. Gas, electricity, and tramways.

Labor and politics. J. R. Commons and J. W. Sullivan.

II. Gas works.

General history and legislation. M. R. Maltbie.

Engineering matters. William Newbigging and J. B. Klumpp.

Finance and accounting. E. H. Turner and R. C. James.

## III. Electricity supply.

- General history and legislation. M. R. Maltbie.
- Engineering matters. J. B. Klumpp and A. E. Winchester.
- Finance and accounting. R. C. James and E. H. Turner.

## IV. Street railways.

- General history and legislation. M. R. Maltbie.
- Engineering matters. N. McD. Crawford and J. H. Woodward.
- Finance and accounting. E. H. Turner and R. C. James.

## V. General.

- Taxation of gas, electricity supply and tramway undertakings. M. R. Maltbie.
- Labor and politics: further answers to schedules. J. R. Commons and J. W. Sullivan.
- General remarks upon financial conditions. R. C. James and E. H. Turner.
- Minutes of hearings in London.
- British tramway history. Frank Parsons.

## ARTICLES

AGAR, J. G. The problem of municipal ownership. *Municipal Affairs*, vi, 511-514 (1902).

American Waterworks Association. A discussion of depreciation and a comparison of rates and bookkeeping methods of municipally and privately owned waterworks. *Proc., American Waterworks Association*, xxxiii, 325-327 (1912).

Brief comments by many different men.

ASHLEY, PERCY. Municipal policy and state control. *Economic Journal*, xiii, 112-120 (1903).

On the current municipal ownership situation in Great Britain.

BAKER, M. N. Municipal ownership. (*In Municipal engineering and sanitation*. New York, 1902.) 275-281.

The writer believes that it is a question of expediency rather than of theory.

BEARD, C. A. Municipal ownership. (*In American city government*. New York, 1912.) 218-241.

A discussion of the theoretical arguments for and against municipalization with a brief account of the results in the United States.

CHASE, H. S. Maintenance and depreciation charges in accounts of public service corporations. *Journal of Accountancy*, iv, 1-9 (1907).  
On the need for proper and uniform accounts as the basis for comparisons of municipal and private ownership.

CLEVELAND, F. A. Municipal ownership as a form of governmental control. *Annals of the American Academy of Political and Social Science*, xxviii, 359-370 (1906).  
Somewhat academic discussion of conditions necessary for success.

COLLIER, W. R. The sale of current to municipally owned distributing systems by central stations. *Electrical Review and Western Electrician*, lxvii, 890-893 (1915).  
Embodies the results of a study in Georgia, illustrated with tables and charts.

COMMONS, J. R. Municipal administration of public utilities. *Independent*, liii, 2633-2636 (1901).  
The writer states that "the vital problem of public ownership is not economical but administrative," and briefly discusses the necessary administrative conditions.

DIVEN, J. M. How can politics be eliminated from municipal waterworks? *Proc., American Waterworks Association*, xxvii, 400-410 (1907).  
Discussion: pp. 411-415. Popular.

EDGAR, C. L., and CLARK, WALTON. Analyses and interpretation of the information concerning the municipal ownership of public utilities collected by the investigators of the National Civic Federation. (*In* National Civic Federation. *Municipal and private operation of public utilities*. New York, 1907.) Pt. I, vol. i, 303-443.

ELY, R. T. Municipal ownership of natural monopolies: with a note on the establishment of a parcels post and the national ownership of the telephone, telegraph and railway. (*In* Studies in the evolution of industrial society. New York, 1903.) 225-254.  
An elementary discussion, the writer favoring municipal ownership where the conditions are suitable.

FAIRLIE, J. A. Some considerations on municipal ownership of public utilities. (*In Essays in municipal administration.* New York, 1908.) 262-274.

Elementary. The author believes that the decision depends on local conditions, but that the cities should have power to own their utilities.

FISHER, W. L. The American municipality. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. I, vol. i, 33-42.

On the character of municipal government in the United States as affecting the municipal ownership decision. See also F. J. Goodnow, "The British municipality."

FRANCISCO, M. J. Municipal ownership *vs.* private corporations: with legal and editorial opinions, tables, and cost of lights as furnished by private companies and municipal plants, with list of municipal plants that have been sold or abandoned. Containing also a comparison of English and American gas and railway plants. Rutland, 1898. 150 pp.

GARRISON, W. L. Establish principle and let methods evolve. *Moody's Magazine*, ii, 504-506 (1906).

*In Municipal ownership and operation: symposium.*  
Brief discussion, advocating single tax instead of municipal ownership.

GOODNOW, F. J. The British municipality. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. I, vol. i, 43-59.

On the character of municipal government in Great Britain as affecting the municipal ownership decision. See also W. L. Fisher, "The American municipality."

HARRISON, JOHN. Municipal trading. *Economic Journal*, x, 251-258 (1900).

On municipal trading in Great Britain.

HUMPHREYS, A. C. Public utilities. *Trans., International Engineering Congress*, 1915: 482-524.

KERR, W. D. Public *vs.* private ownership. *Electric Railway Journal*, xliv, 723-725 (1914).

Deals chiefly with the effect of valuations on the municipal ownership movement.

KING, C. L. Municipal ownership versus adequate regulation. (*In* The regulation of municipal utilities. New York, 1912.) 23-55.  
 A good elementary discussion. The writer believes that eventual municipal ownership is desirable but that regulation will be satisfactory until this is expedient.

LOWELL, A. L. Municipal trading. (*In* The government of England. 2d edition. New York, 1912.) ii, 233-267.  
 A good general discussion, public utilities being treated only incidentally.

LYONS, B. F. Municipal ownership. *Progressive Age*, xxiv, 39-46 (1906).  
 Discussion of method of studying results of existing municipal plants, with analyses of the results in Wheeling, Manchester and Sheffield for illustration.

— Municipal ownership of gas works. *Municipal Engineering*, xxx, 49-58 (1906).

MALTBIE, M. R. Municipal ownership. (*In* McLAUGHLIN, A. C., and HART, A. B. *Cyclopedia of American government*. New York, 1914.) ii, 486-487.

MATEER, R. B. Municipal ownership. *Journal of Electricity, Power and Gas*, xxxi, 344-345 (1913).  
 A statement of some of the conditions which cause municipalization; very brief, but concise.

MATTHEWS, NATHAN. Administrative provisions: management of water, gas, electric light and similar municipal enterprises. (*In* Municipal charters. Cambridge, 1914.) 82-89.  
 A good discussion of the provisions in the city charter which make for efficient municipal operation of public utilities.

METZ, H. A. Why municipal service is expensive. *Moody's Magazine*, ii, 667-671 (1906).  
*In* Municipal ownership and operation: symposium.  
 An argument for public ownership and private operation.

MICHAELIS, G. V. S. Is municipal ownership a dream? *Moody's Magazine*, ii, 538-541 (1906).  
*In* Municipal ownership and operation: symposium.  
 On the question of whether we are ready for municipal ownership as yet.

Moody's Magazine. Municipal ownership and operation: symposium. *Moody's Magazine*, ii, 500-544, 639-674 (1906).  
Cause of municipal ownership agitation. E. W. Burdett.  
Establish principle and let methods evolve. W. L. Garrison.  
Cleveland's street railway problems. H. T. Newcomb.  
Municipal ownership in Cleveland. F. C. Howe.  
Municipal ownership a delusion. Henry Clews.  
Municipal ownership a business problem. Calvin Tomkins.  
Municipal ownership uneconomic. W. W. Freeman.  
Municipal ownership in Chicago. E. F. Dunne.  
Municipal ownership always a failure. T. C. Martin.  
Public service should be free. L. F. C. Garvin.  
Great Britain's lesson. H. R. Meyer.  
The political principle of public ownership. L. F. Post.  
Is municipal ownership a dream? G. V. S. Michaelis.  
Reasons for municipal ownership. John Ford.  
Public interest demands public ownership. Frank Parsons.  
Municipal ownership costly and dangerous. Arthur Williams.  
Municipal ownership for all public utilities. T. L. Johnson.  
Glasgow and its municipal tramways. E. W. Hamlen.  
Municipal ownership to purify politics. D. F. Wilcox.  
Omaha's experience. E. W. Mayo.  
Municipal ownership would stop corruption. W. P. Hill.  
Why municipal service is expensive. H. A. Metz.  
Standard reports and uniform accounting. Harvey Chase.

MOORE, C. E. Experience with a municipal gas plant. *Public Service*, ii, 51-52 (1907).  
History of municipal ownership in Santa Clara, with conclusions as to the general desirability of municipal ownership.

PARSONS, FRANK. The legal aspects of monopoly. (*In BEMIS*, E. W. Municipal monopolies. 4th edition. New York, 1904.) 425-501.  
A good, annotated discussion of the right of cities to engage in business, to compete with private plants, to take property by condemnation, to prevent the use of injurious business methods and to regulate rates and service.

— Municipal operation versus private operation of municipal monopolies: general introduction. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. I, vol. i, 113-122.

PEARSON, GEORGE. Municipal trading. *Electrical Engineer*, new series, xxiii, 753-757 (1899).  
The writer tabulates and discusses the arguments for and against municipal ownership, the conclusions favoring municipalization.

PERRINE, F. A. C. Validity of electric light comparisons. (*In* BEMIS, E. W. Municipal monopolies. 4th edition, New York, 1904.) 286-296.

Appendix to E. W. Bemis, "The latest electric light reports." Includes two charts.

POST, L. F. The political principle of public ownership. *Moody's Magazine*, ii, 535-537 (1906).

*In* Municipal ownership and operation: symposium.  
An argument for private management of private functions and public management of public functions.

RANDOLPH, C. F. Municipal ownership of public utilities. *Yale Law Journal*, xxii, 355-382, 461-489 (1913).

An excellent and readable work on municipal ownership and the law.

ROWE, L. S. Fundamental principles involved in municipal ownership. (*In* Problems of city government. New York, 1908.) 271-280.

The conclusion is that the desirability of municipal ownership depends on local conditions.

— Municipal ownership and operation: the value of foreign experience. *American Journal of Sociology*, xii, 241-253 (1906).

Considers the results abroad of interest and as offering valuable lessons, but not of great weight in making the final decision here, because of different conditions. Favors municipal ownership.

The same article, with the omission of a few paragraphs, is printed in the Proc., National Conference for Good City Government.

— (In Problems of city government. New York, 1908.)

330-349.

Reprint.

— Proc., National Conference for Good City Government, 1906: 280-290.

SHEPARD, E. M. City owning and leasing. *Municipal Affairs*, vi, 714-720 (1902).

Rapid transit.

SHEPARDSON, G. D. Why some municipal electric plants do not pay better. *Electrical Review*, xxxvii, 37, 52-55 (1900).

Discusses arguments for and against municipalization and conditions necessary for success.

SHEPARDSON, G. D. Why some municipal electric plants do not pay better. *Electrical Review and Western Electrician*, xxxvii, 3752-3755 (1900).

— — — Municipal Engineering, xix, 103-108 (1900).

SHIBLEY, G. H. Referendum and initiative in relation to municipal ownership. *Municipal Affairs*, vi, 781-786 (1902). Under majority rule through the initiative and referendum, the writer advocates municipal ownership.

SIMPSON, J. Municipal powers *re*. lighting plants. *Municipal Journal*, xxxviii, 880-883 (1915). A brief review of court decisions as to the powers of the municipality with reference to municipal ownership of electric lighting.

TAUSSIG, F. W. Public ownership and public control. (*In Principles of Economics*, New York, 1913.) 397-418. Elementary; very good.

TIEDEMAN, C. G. Government ownership of public utilities: from the standpoint of constitutional limitations. *Harvard Law Review*, xvi, 476-490 (1903).

TIGHE, J. L. Municipal water supply revenue. *Journal of the New England Waterworks Association*, xviii, 352-387 (1904). An argument against using profits from municipal enterprises to relieve taxation.

TOMKINS, CALVIN. Municipal ownership a business problem. *Moody's Magazine*, ii, 517-519 (1906). *In Municipal ownership and operation: symposium.* The writer believes that economic considerations should govern the decision.

WAGNER, B. M. The acquisition of private water plants by municipalities. *Journal of the American Waterworks Association*, ii, 25-41 (1915). Discussion: pp. 582-584. A good brief account of methods of municipal acquisition and of valuation for condemnation.

WARNER, C. A. What's wrong with municipal ownership? *Journal of Electricity, Power and Gas*, xxxiii, 504-506 (1914). A popular analysis of the weak points in municipal ownership, with suggested remedies.

WHINERY, SAMUEL. Municipal ownership. (*In Municipal public works: their inception, construction and management.* New York, 1903.) 189-218.  
 A good elementary discussion; the writer believes that a general decision cannot be made as yet.

WILCOX, D. F. The control of public utilities. (*In The American city: a problem in democracy.* New York, 1911.) 52-90.  
 A very good elementary discussion. The writer favors municipal ownership as a theory, but believes proper franchise control to be better for the present.

— Effects of state regulation upon the municipal ownership movement. *Annals of the American Academy of Political and Social Science*, liii, 71-84 (1914).  
 An excellent discussion.

— Fundamental planks in a public utility program. *Annals of the American Academy of Political and Social Science*, lvii, 8-19 (1915).  
 Maintains that preparation should be made for ultimate municipal ownership (pp. 16-19).

— — — American City, xi, 480-485 (1914).  
 Abstract.

— Public utility advice from the public point of view. *American City*, viii, 264-266 (1913).  
 Advice to the cities in preparation for ultimate municipal ownership.

WILES, C. W. Ownership of public utilities. *Proc., American Waterworks Association*, xxviii, 501-504 (1908).

WILLCOX, W. F. Methods of determining the economic productivity of municipal enterprises. *American Journal of Sociology*, ii, 378-391 (1896).

WINCHESTER, A. E. South Norwalk's municipal electric works. *Annals of the American Academy of Political and Social Science*, lvii, 228-245 (1915).  
 Historical, with comparison of the private and municipal plants. Some general discussion of municipal ownership. Believes that success depends on local conditions.

WOODWARD, PARK. Municipal ownership. *Proc., American Waterworks Association*, xxx, 123-127 (1910).  
 A very brief review of arguments for and against, the conclusion being that municipal ownership freed from politics is desirable.

## IN FAVOR

ADAMS, A. D. Cause and results of municipal gas plants. *Municipal Affairs*, vi, 648-655 (1902).

— Cost of municipal *vs.* private gas. *Municipal Journal and Engineer*, xv, 13-14 (1903).

The writer asserts that municipal plants are more economically managed than private. Includes an analytical table of the average cost of gas in the private and municipal plants of each state.

ADAMS, H. C. Municipal ownership and corrupt politics. *Outlook*, lxx, 726-727 (1902).

A popular article in favor of municipal ownership of street railways. The writer believes that the decision in regard to government ownership of railways and municipal ownership of street railways is not necessarily the same.

BAKER, M. N. Waterworks. (*In BEMIS, E. W. Municipal monopolies*. 4th edition. New York, 1904.) 3-52.

A thorough comparative and critical study of municipal and private operation of waterworks in the United States, and an analysis of the arguments for and against municipalization. The writer favors municipal ownership; includes many tables of statistics.

BEMIS, E. W., and INGRAM, F. F. How the people should acquire public utilities: a criticism of Mr. Brown's paper. *Arena*, xxxiv, 45-47 (1905).

A good criticism of W. R. Brown, "Municipal ownership and league organization" by two advocates of municipalization.

— Municipal monopolies. New York, 1899. 4th edition, 1904. 691 pp.

Waterworks. M. N. Baker.

Municipal electric lighting. J. R. Commons.

The latest electric light reports. E. W. Bemis.

Appendix: validity of electric light comparisons. F. A. C. Perrine.

The telephone. Frank Parsons.

Municipal franchises in New York. Max West.

Legal aspects of monopoly. Frank Parsons.

Street railways. E. W. Bemis.

Gas. E. W. Bemis.

Regulation or ownership. E. W. Bemis.

A very good symposium favoring municipal ownership; now somewhat out of date.

BEMIS, E. W. Municipal ownership of gas in the U. S. Publications, American Economic Association, vi, 295-471 (1891).

Extensive study, with many tables of data and some discussion.

— Regulation or ownership. (*In Municipal monopolies*. 4th edition. New York, 1904.) 631-680.

A general historical review and analysis, the conclusion being in favor of municipal ownership.

BROWN, G. S. Municipal ownership of public utilities. North American Review, clxxxii, 701-708 (1906).

BROWN, W. R. Municipal ownership and league organization. Arena, xxxiii, 377-382 (1905).

The writer offers a unique solution of the municipal ownership problem. He advocates (1) municipal purchase with amortization of the cost through reduced interest charges, (2) the formation of an interstate city league to give moral and statistical aid, and (3) necessary changes of existing laws.

For a reply, see E. W. Bemis and F. F. Ingram, "How the people should acquire public utilities: a criticism of Mr. Brown's paper."

BURNS, JOHN. Municipal ownership a blessing. Independent, lx, 449-452 (1906).

COMMONS, J. R. Municipal electric lighting. Municipal Affairs, i, 631-673 (1897).

A thorough comparative and critical study of municipal and private operation of electric lighting plants in the United States. Includes many tables of statistics of operation and of rates. The writer favors municipal ownership.

— — — (*In BEMIS, E. W. Municipal monopolies*. 4th edition. New York, 1904.) 55-180.

Reprint.

CROSSER, ROBERT. Why I believe in municipal ownership. Annals of the American Academy of Political and Social Science, lvii, 282-292 (1915).

CUTTING, R. F. Public ownership and social conscience. Municipal Affairs, iv, 3-12 (1900).

The writer believes that as municipal ownership promotes good government, it is better not to wait for good government before adopting it.

DONALD, ROBERT. The case for municipal trading. *Contemporary Review*, lxxxiii, 485-500, 623-639 (1903).  
An answer to various arguments against municipal ownership in Great Britain, with an analysis of results. Includes tables of statistics.

— Municipal trading: a defense. *Contemporary Review*, lxxviii, 227-240 (1900).  
A reply to J. L. Avebury, "Municipal trading." Answers each argument in turn.

— The principles of municipal ownership. *Outlook*, lxxxii, 504-511 (1906).

— Recent attacks on municipal ownership in Great Britain. *Municipal Affairs*, vi, 579-613 (1902).  
Historical and critical analysis, in answer to attacks on municipal ownership, which the writer asserts are stimulated by people interested in the companies. Includes many tables of statistics.

ELY, R. T. Municipal ownership of natural monopolies. *North American Review*, clxxii, 445-455 (1901).  
A good argument for municipal ownership in general. The writer opposes the view that the desirability must be separately decided for each city. He believes that even though our municipal governments at present may be incapable of properly operating the utilities, municipalization would itself bring about better conditions.

FORD, JOHN. Reasons for municipal ownership. *Moody's Magazine*, ii, 542-544 (1906).  
*In Municipal ownership and operation: symposium.*

FOULKE, W. D. Conservation in municipalities. *Proc., National Conference for Good City Government*, 1910: 12-21.

GARVIN, L. F. C. Public service should be free. *Moody's Magazine*, ii, 530-531 (1906).  
*In Municipal ownership and operation: symposium.*  
Favors single tax and municipal ownership.

GLADDEN, WASHINGTON. Public service companies and city governments. *Outlook*, lxvi, 502-508 (1900).  
The writer advocates municipal ownership to lessen corruption. Although not a panacea, he believes that through municipal ownership runs the path of least resistance to better government.

GROUT, E. M. New York City should own the gas supply. *Municipal Affairs*, i, 225-244 (1897).  
A popular study.  
For a reply, see A. R. Foote, "No government should operate an industry."

HARRISON, C. H. The regulation of public utilities. *Annals of the American Academy of Political and Social Science*, lvii, 54-61 (1915).

HATTON, T. C. Municipal ownership of water supplies. *Proc., American Society of Municipal Improvements*, 1904: 137-141.

HILL, W. P. Municipal ownership would stop corruption. *Moody's Magazine*, ii, 662-667 (1906).  
*In Municipal ownership and operation: symposium.*

HOWE, F. C. The case for municipal ownership. *Proc., American Political Science Association*, ii, 89-104 (1905).  
Discussion: pp. 113-125. Advocates municipal ownership for governmental rather than economic reasons.

— Publications, *American Economic Association*, 3d series, vii, 113-132 (1906).

— The way out: municipal ownership. (*In The city: the hope of democracy*. New York, 1906.) 113-135.

INGRAM, F. F. Municipal ownership and operation *versus* private ownership or control. *Arena*, xxxi, 458-463 (1904).  
The writer believes that regulation is a failure and that city ownership and leasing is worse than private ownership.

— Should the people or the corporations light our cities? *Arena*, xxx, 392-400 (1903).  
An argument for municipal ownership, illustrated by a comparison of municipal and private management in Detroit.

JAMES, E. J. The relation of the modern municipality to the gas supply. *Publications, American Economic Association*, i, 54-122 (1886).  
A thorough, but early study of the gas industry in various countries, and its municipalization.

JOHNSON, T. L. Municipal ownership for all public utilities. Moody's Magazine, ii, 649-651 (1906). In Municipal ownership and operation: symposium. Asserts that municipal ownership would purify politics and give better and cheaper service.

KING, C. L. Municipal ownership versus adequate regulation. (In The regulation of municipal utilities. New York, 1912.) 23-55. A good elementary discussion. The writer believes that eventual municipal ownership is desirable but that regulation will be satisfactory until this is expedient.

— Municipal ownership *vs.* regulation. New Republic, i, 12-14 (1914). A report of the conclusions of the Conference of American mayors, and a popular statement of the reasons for the tendency towards municipalization.

LEBER, O. H. Ownership of municipal monopolies. Municipal Journal and Engineer, xvii, 14-16 (1904).

MALTBIE, M. R. A tale of two cities: water supply in London and Philadelphia. Municipal Affairs, iii, 193-214 (1899). An historical and comparative study of the private supply in London, and the municipal supply in Philadelphia, favoring municipal ownership; includes tables of statistics.

MARTIN, JOHN. Business thrift in American and European cities, especially with respect to franchises. Proc., National Conference for Good City Government, 1905: 154-169. A popular discussion of municipal ownership experience in various places, the writer favoring municipalization.

MATEER, R. B. Municipal ownership. Journal of Electricity, Power and Gas, xxxi, 344-345 (1913). A statement of some of the conditions which cause municipalization; very brief and concise.

National Civic Federation. Shall the government own and operate the railroads, the telegraph and telephone systems? Shall the municipalities own their utilities? Affirmative side. New York, 1915. 108 pp.

PARKER, F. W. Municipal ownership and graft. *World Today*, ix, 721-724 (1905).

PARSONS, FRANK. City ownership and operation of street railways. *Arena*, xxv, 198-209 (1901).  
An interesting popular argument for public ownership, in the form of questions and answers.

—, and ROBERTS, F. H. H. Municipal ownership debated. *Public Service*, i, 67-75 (1906).  
Papers before League of American municipalities.  
"For." Frank Parsons. pp. 68-72.  
"Against." F. H. H. Roberts. pp. 72-75.

— Public interest demands public ownership. *Moody's Magazine*, ii, 639-643 (1906).  
*In* Municipal ownership and operation: symposium.  
Opposes use of public streets for private gain, and asserts that private ownership of utilities causes corruption.

— Public ownership. (*In* The city for the people. Philadelphia, 1900?) 17-254.  
An arraignment of the public service corporations for alleged abuses and corruption, and an argument for municipal ownership. Includes many quotations from other writers and some statistics; very popular in style.

— — Arena, xxix, 118-124 (1903).  
A popular argument for municipal ownership, including a list of ten reasons for great economies effected thereby.

— Public ownership and low rates. *Annals of the American Academy of Political and Social Science*, xxiv, 361-363 (1904).  
Attempt to prove that public ownership tends to lower rates. Theoretical; with one chart.

POTTS, A. F. A successful substitute for municipal ownership. *Municipal Engineering*, xiv, 181-187 (1898).  
An account of the Consumers' gas trust of Indianapolis.

— — *American Monthly Review of Reviews*, xx, 576-578 (1899).

PRIESTLY, C. H. Municipal ownership of water undertakings. *Trans., British Association of Waterworks Engineers*, x, 114-121 (1905).  
Discussion: pp. 122-136.

ROSEWATER, VICTOR. The case for municipal ownership of electric lighting. *Municipal Affairs*, vi, 622-635 (1902).

ROWE, L. S. Municipal ownership and operation: the value of foreign experience. *American Journal of Sociology*, xii, 241-253 (1906).

Considers the results abroad of interest and as offering valuable lessons, but not of great weight in making the final decision here, because of different conditions. Favors municipal ownership.

The same article, with the omission of a few paragraphs, is printed in the Proc., National Conference for Good City Government.

— — — (*In Problems of city government*. New York, 1908.) 330-349.  
Reprint.

— — — Proc., National Conference for Good City Government, 1906: 280-290.

ROYSE, C. A. Will public ownership increase or diminish political corruption? *Arena*, xxxviii, 373-384 (1907).

An historical sketch of political corruption in England from the earliest times. The writer concludes that public ownership of monopolies will decrease corruption.

SHAW, G. B. The common sense of municipal trading. London, 1908. 120 pp.

A very interesting argument for municipal socialism.

SHEPARD, E. M. City owning and leasing. *Municipal Affairs*, vi, 714-720 (1902).

Rapid transit.

SHIBLEY, G. H. Referendum and initiative in relation to municipal ownership. *Municipal Affairs*, vi, 781-786 (1902).

Under majority rule through the initiative and referendum, the writer advocates municipal ownership.

THOMPSON, C. D. Municipal ownership. (*In National Civic Federation. Shall the government own and operate the railroads, etc. Affirmative side*. New York, 1915.) 71-108.

WARNER, J. DEW. Should greater New York operate its street railways? Yes. *Municipal Affairs*, i, 421-457 (1897).

A popular, annotated study.

WILCOX, D. F. Municipal ownership. (*In Municipal franchises. New York, 1911.*) ii, 803-809.

— Municipal ownership to purify politics. Moody's Magazine, ii, 655-658 (1906).

*In Municipal ownership and operation: symposium.*

ZANGERLE, J. A. The larger view of municipal ownership. Cleveland, 1906? 67 pp.

An attempt to "divert public sentiment from the dollar view."

ZUEBLIN, CHARLES. Municipal ownership. (*In American municipal progress. Revised edition. New York, 1916.*) 359-375.

#### OPPOSED

AGAR, J. G. Shall American cities municipalize? Value of foreign experience as a guide. Municipal Affairs, iv, 13-23 (1900).

A popular description of municipal ownership in England and Germany, and a comparison with American conditions. Opposes municipal ownership in America for the present.

ALLEN, W. S. The gas supply and the public. Municipal Affairs, vi, 656-667 (1902).

The writer advocates the sliding scale as preferable to municipalization.

— Some problems of public ownership. North American Review, cxcvii, 8-21 (1913).

An interesting, popular discussion, the writer favoring proper regulation instead of municipal ownership, based on logic and experience.

AVEBURY, J. L. The effect of municipal trading on private enterprise. (*In On municipal and national trading. New York, 1907.*)

A popular argument against municipal ownership, with many quotations from other writers.

— Municipal trading. Contemporary Review, lxxviii, 28-37 (1900).

On current legislation; discusses public utilities only incidentally. For a reply, see Robert Donald, "Municipal trading: a defense."

BLAKE, H. W. Contrast between company and municipal ownership and management of public utilities. *Street Railway Journal*, xxvi, 28-31 (1905).

Considers the results of municipal ownership in Great Britain, and applies them to conditions in the United States.

BOND, WALTER. Municipal trading. *Fortnightly Review*, lxxii (new series, lxvi), 669-682 (1899).

On "the fallacious arguments" for municipal trading.

BOURNE, JONATHAN, JR. Evils of government ownership. Proc., American Electric Railway Association, 1915: 114-120.

Discriminations and politics.

— — — Aera, iv, 177-183 (1915).

Reprint.

BOWKER, R. R. Public control, ownership or operation of municipal franchises? With especial reference to electric lighting. *Municipal Affairs*, i, 605-630 (1897).

Includes a discussion of the results of municipal ownership in various cities, United States and foreign.

BROWN, W. H. Public ownership and popular government. *American Journal of Sociology*, xii, 328-340 (1906).

The writer believes the municipal ownership movement is due to dissatisfaction with the conduct of the private companies, and resentment against large aggregations of capital. Advocates proper regulation as the best solution of the problem.

BURDETT, E. W. The agitation for municipal ownership in the United States: its origin, meaning and proper treatment. Proc., National Electric Light Association, 1906; vol. i, 537-555.

The writer believes it due very largely to resentment against abuses of great wealth and corporate facilities. After an analysis of municipal ownership results in Great Britain, which he considers less successful than commonly thought, he concludes that success there would not mean success here.

— Cause of municipal ownership agitation. *Moody's Magazine*, ii, 501-503 (1906).

In *Municipal ownership and operation: symposium*.

BURDETT, E. W. Municipal ownership in Great Britain. *Journal of Political Economy*, xiv, 257-314 (1906).  
An excellent and thorough study of results, with tables of statistics.  
The writer concludes that as a whole municipal ownership there has not been successful, and that success would not mean similar results in this country because of different conditions. These conditions are also analyzed, and there is a good summary.

— Municipal ownership in the United States. *Inter-Nation*, n. s. no. 3, 44-60 (1906).

CAHOON, J. B. A business argument against municipal ownership. *City Government*, vii, 78-80 (1899).

— Municipal electric lighting opposed. *Municipal Affairs*, vi, 636-647 (1902).  
A critical analysis of results in the United States; with a table of statistics.

CLARK, W. J. The figures in the case. *Public Service*, iv, 89-94 (1908).  
Relates chiefly to municipal ownership in Great Britain.

— Municipal ownership in Great Britain and in the United States. *Proc., American Street and Interurban Railway Association*, 1907: 271-284.  
A comparison of English and American street railways, with analysis of results. The conclusions are strongly in favor of private operation.

CLEWS, HENRY. Municipal ownership a delusion. *Moody's Magazine*, ii, 515-516 (1906).  
*In Municipal ownership and operation: symposium.*

CRAVATH, J. R. The municipal ownership of electric light plants. *World Today*, xii, 374-379 (1907).  
A very good popular discussion, the conclusion being that private ownership is preferable for the present and municipal ownership eventually.

DANIELS, W. M. Municipal ownership. *Proc., American Political Science Association*, ii, 105-113 (1905).  
Discussion: pp. 113-125. The writer believes that the desirability of municipal ownership is not proved; and that economic considerations are of great importance in making a decision.

DANIELS, W. M. Municipal ownership. Publications, American Economic Association, 3d series, vii, 133-143 (1906). Advocates franchise taxation and compensation instead of municipal ownership.

DAVIES, D. H. The cost of municipal enterprise. *Journal of the Society of Arts*, xlvi, 224-237 (1899). An argument against municipal ownership because of increasing municipal indebtedness, and answers to various arguments; includes tables and charts.

— The cost of municipal trading. *Journal of the Society of Arts*, li, 189-203 (1903).

DOHERTY, H. L. Some features of municipal ownership. *American Gas Light Journal*, lxxix, 684-688 (1903). A discussion of arguments for and against municipalization, the writer considering municipal ownership largely a fad, prompted by dislike for all corporations.

FOOTE, A. R. Municipal ownership problem solved. *Moody's Magazine*, iii, 720-726 (1907). Regulation is stated to be the solution.

— No government should operate an industry. *Municipal Affairs*, i, 245-289 (1897). A reply to E. M. Grout, "New York City should own the gas supply."

FRANCIS, V. H. Why municipal plants are failures. *Public Service*, xiii, 27-32 (1912).

FRANCISCO, M. J. Municipal ownership: its fallacy, with legal and editorial opinions, tables and cost of lights as furnished by private companies and municipal plants. Rutland, 1893. 104 pp.

FREEMAN, W. W. Municipal ownership uneconomic. *Moody's Magazine*, ii, 520-521 (1906). In *Municipal ownership and operation: symposium*.

GASKILL, D. L. Causes of failures in municipal lighting. *Concerning Municipal Ownership*, iii, 215-218, 235-238 (1908). — — Public Service, v, 88-90 (1908).

GONDEN, H. J. Regulation *vs.* municipal ownership. *Public Service*, iii, 105-107 (1907).

— Robbing Peter. *Public Service*, xvii, 37-38 (1914). Discusses concealment in municipal plant reports.

GUYOT, YVES. Where and why public ownership has failed. New York, 1914. 459 pp.

Book I. Public and private trading operations.  
II. Financial results of government and municipal ownership.  
III. Administrative results.  
IV. Political and social consequence of public operation.

HAMLEN, E. W. Glasgow and its municipal tramways. *Moody's Magazine*, ii, 652-655 (1906).  
*In Municipal ownership and operation: symposium.*  
A brief comparison of Glasgow and Boston traction, favoring private ownership.

HIGGINS, E. E. Municipal and private management of street railways: a study of results and possibilities. *Municipal Affairs*, i, 458-490 (1897).  
A long, popular discussion, with tables and diagrams. The writer is strongly opposed to municipal ownership, and favors profit sharing and other contractual regulations.

HILL, J. W. Municipal ownership of public utilities. *Proc., Central States Waterworks Association*, 1907: 16-32.  
Discussion: pp. 32-33.  
— — — Engineering News, lviii, 380-381 (1907). Abstract.  
— — — World Today, xii, 621-625 (1907).

HUNTER, W. R. Municipal ownership of utilities. *Public Service*, i, 23-25 (1906).

HUTCHINSON, R. W., JR. The question of municipal ownership. *Public Service*, ii, 87-89 (1907).

JONES, C. L. American municipal services from the standpoint of the entrepreneur. *Annals of the American Academy of Political and Social Science*, xxviii, 371-384 (1906). Academic discussion of both sides of the question, the writer favoring private ownership under proper restrictions.

KENT, C. A. Suggestions for and against municipal ownership of public utilities. Publications of the Michigan Political Science Association, v, 349-370 (1904).

Discussion: pp. 371-388.

LOCKWOOD, H. A. Are our municipalities to become business corporations? Concerning Municipal Ownership, iii, 47-52 (1908).

MARSTON, GLENN. The fallacies of municipal ownership. Public Service, xiv, 107-108, 147-149, 187-188 (1913).

— Guarding against municipal plant agitation. Electrical Review and Western Electrician, lxix, 632-633 (1916).

A discussion of alleged causes of the municipal ownership agitation; with suggested remedies.

See also his "Poor service causes municipal ownership."

— Poor service causes municipal ownership. Electrical Review and Western Electrician, lxix, 806-807 (1916).

MARTIN, T. C. Municipal ownership always a failure. Moody's Magazine, ii, 526-529 (1906).

In Municipal ownership and operation: symposium.  
Includes a table of statistics.

MEYER, H. R. Great Britain's lesson. Moody's Magazine, ii, 532-534 (1906).

In Municipal ownership and operation: symposium.  
The writer asserts that lack of corruption in England is not a valid argument, for there was none before municipalization.

National Civic Federation. Shall the government own and operate the railroads, the telegraph and telephone systems? Shall the municipalities own their utilities? Negative side. New York, 1915. 119 pp.

OWEN, MARK. Why municipal ownership cannot be financially profitable. Concerning Municipal Ownership, vi, 176-180 (1913).

PARSONS, FRANK, and ROBERTS, F. H. H. Municipal ownership debated. Public Service, i, 67-75 (1906).

Papers before League of American municipalities.

"For." Frank Parsons. pp. 68-72.

"Against." F. H. H. Roberts. pp. 72-75.

PORTER, R. P. The dangers of municipal ownership. New York, 1907. 356 pp.  
An historical study of municipal ownership in Great Britain, with application of the conclusion to conditions in the United States.

— The dangers of municipal trading. London, 1907. 320 pp.  
An English reprint of "The dangers of municipal ownership," with two additional chapters.

— European and American methods and results compared. Municipal Affairs, vi, 539-578 (1902).  
A popular historical discussion and comparison of municipal ownership in Great Britain and private ownership in the United States; with tables of data.

— Municipal trading: European and American methods and results compared — the views of an advocate of private ownership of all public utilities. Municipal Journal and Engineer, xiv, 222-224, 269-273; xv, 4-8 (1903).

ROSECRANTZ, C. M. Some limitations and objections to municipal ownership. Annals of the American Academy of Political and Social Science, lvii, 254-273 (1915).  
Defense of the companies, and good summary of arguments for private ownership.

SELLS, E. W. Corporate management compared with government control. Concerning Municipal Ownership, iii, 107-108 (1908).  
The writer states that in his experience as an accountant he has generally found company management economical and municipal management the reverse.

SIMMONS, F. G. Private versus municipal ownership. Public Service, i, 87-90 (1906).

SLOAN, H. M. Municipal ownership and operation of street railways. Street Railway Review, xii, 211-213 (1902).

STANDROD, D. W. A utility commissioner's view of municipal ownership. Public Service, xv, 151-152 (1913).

SULLIVAN, J. W. City transit systems: municipal *vs.* company ownership and operation. (*In* National Civic Federation. Shall the government own and operate the railroads, etc. Negative side. New York, 1915.) 100-119.

SULLIVAN, J. W. Municipalization or a just regulation? A plea for the facts. (*In* National Civic Federation. Shall the government own and operate the railroads, etc. Negative side. New York, 1915.) 60-75.

THURBER, F. B. Some arguments against municipal ownership. *North American Review*, clxxxii, 853-860 (1906).

TOWLER, W. G. Socialism in local government. New York, 1909. 336 pp.

A popular study of the increase in municipal socialism in Great Britain, the writer opposing municipal trading.

TYNG, L. H. Private *vs.* public operation of gas companies. *Moody's Magazine*, iv, 244-247 (1907).

A very popular argument for private operation because of greater initiative and efficiency.

WEBSTER, W. A. American principles in business and politics. *Concerning Municipal Ownership*, iii, 67-70 (1908).

WILLIAMS, ARTHUR. Municipal ownership costly and dangerous. *Moody's Magazine*, ii, 643-649 (1906).

*In* Municipal ownership and operation: symposium.

Experience in various places shows that private operation is cheaper and there is less political danger.

— Municipal ownership of public utilities. (*In* Y. M. C. A., New York, West Side Branch. *Public utility economics*. New York, 1914.) 31-44.

A very popular argument against municipal ownership, with brief reference to the alleged unsuccessful results in different places.

WORTHINGTON, THOMAS. Regulation *vs.* municipal ownership. *Public Service*, xvi, 23-25 (1914).

## HISTORY

### UNITED STATES AND FOREIGN

AGAR, J. G. Shall American cities municipalize? Value of foreign experience as a guide. *Municipal Affairs*, iv, 13-23 (1900).

A popular description of municipal ownership in England and Germany, and a comparison with American conditions. Opposes municipal ownership in America for the present.

American Academy of Political and Social Science. Municipal ownership and municipal franchises. *Annals of the American Academy of Political and Social Science*, xxvii, no. 1 (1906). 258 pp.

Glasgow's experience with municipal ownership and operation. Robert Crawford.

The water, gas and electric light supply of London. Percy Ashley. Municipal ownership and operation of street railways in Germany. L. S. Rowe.

Transportation facilities and street railway traffic in London. Lynden Macassey.

The movement for municipal ownership in Chicago. H. S. Grosser.

Street railway franchises in Massachusetts. W. S. Allen.

The gas, electric light, water and street railway services in New York City. R. G. Monroe.

Madrid: its government and municipal services. C. L. Jones.

The problems of city government from the administrative point of view. J. A. Fairlie.

Home rule charter movements in Missouri. J. W. S. Peters.

Baltimore under its new charter. William Reynolds.

Significance of the recent reform movement in Philadelphia. F. S. Edmonds.

Municipal progress, 1904-1905. C. R. Woodruff.

The relation of the American municipalities to the gas and electric light service. Symposium.

Constitutional limitations relating to cities and their affairs. R. W. Skinner, Jr.

BAKER, N. D. Municipal ownership. *Annals of the American Academy of Political and Social Science*, lvii, 188-193 (1915).

States that municipal ownership in Europe was undertaken primarily to lessen taxation; in the United States because of abuses by the companies.

BEMIS, E. W. Gas. (*In Municipal monopolies*. 4th edition. New York, 1904.) 587-628.

An historical sketch of private and municipal ownership in various cities of the United States and Great Britain.

— Street railways. (*In Municipal monopolies*. 4th edition. New York, 1904.) 505-583.

Public ownership in America: 565-569.

British experience: 569-583.

An extensive historical study.

BOWKER, R. R. Public control, ownership or operation of municipal franchises? With especial reference to electric lighting. *Municipal Affairs*, i, 605-630 (1897).  
Includes a discussion of the results of municipal ownership in various cities, United States and foreign.

CLARK, W. J. Public utilities here and abroad. *Aera*, iii, 451-464 (1914).  
A general survey of utility development, with tables of statistics.

COMMONS, J. R. Labor and municipal politics. (*In Labor and administration*. New York, 1913.) 158-194.  
A reprint of his "Labor and politics."

— Labor and politics. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. I, vol. i, 88-112.  
On the effect of municipal ownership on labor conditions and politics in Great Britain and the United States.  
See also J. W. Sullivan, "The labor report."

CURTIS, C. E. Street railways and their relation to the public. *Yale Review*, vi, 17-36 (1897).  
A very good, early review of comparative franchise and municipal ownership history in the United States, Canada and Great Britain.

FAIRLIE, J. A. Essays in municipal administration. New York, 1908. 374 pp.  
Ch. viii. Recent legislation on municipal functions in the United States.  
xi. Municipal electric lighting in Detroit.  
xv. Municipal activities in Great Britain.  
xvi. Municipal conditions in some European cities.  
xvii. Municipal government in Vienna.  
xviii. Municipal government in Italy.  
Includes discussion of municipal ownership in various cities of Europe and America.

— Municipal improvements. (*In Municipal administration*. New York, 1901.) 225-313.  
Waterworks, public lighting and urban transportation, 270-300.  
Municipal ownership, 310-313.  
A very general and elementary historical treatment.

FRANCISCO, M. J. Municipal ownership vs. private corporations: with legal and editorial opinions, tables and cost of lights as

furnished by private companies and municipal plants, with list of municipal plants that have been sold or abandoned. Containing also a comparison of English and American gas and railway plants. Rutland, 1898. 150 pp.

HOWE, F. C. Municipal ownership in Europe. (*In* The modern city and its problems. New York, 1915.) 176-193.

— Municipal ownership: the testimony of foreign experience. Annals of the American Academy of Political and Social Science, lvii, 194-208 (1915). Discusses municipal ownership in Great Britain and Germany especially. Favors municipal ownership here.

— — — (*In* National Civic Federation. Shall the government own and operate the railroads, etc. Affirmative side. New York, 1915.) 31-48.

MARTIN, JOHN. Business thrift in American and European cities, especially with respect to franchises. Proc., National Conference for Good City Government. 1905: 154-169.

PORTER, R. P. Municipal trading. Engineering, lxxiv, 390-394 (1902). A comparison of municipal ownership in the United States and Great Britain.

— Municipal trading: European and American methods and results compared — the views of an advocate of private ownership of all public utilities. Municipal Journal and Engineer, xiv, 222-224, 269-273; xv, 4-8 (1903).

ROBBINS, HAYES. Public ownership versus public control. American Journal of Sociology, x, 787-813 (1905). A discussion and comparison of the results in Great Britain and the United States. The street railway systems of Glasgow and Boston are discussed at length as typical. Favors private ownership under regulation.

ROWE, L. S. The relation of the city to public utilities. (*In* Problems of city government. New York, 1908.) 208-240. A good elementary discussion, including an historical comparison of municipal and private plants (pp. 218-231), and tables of statistics.

SULLIVAN, J. W. The labor report. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. I, vol. i, 60-87.

On the effect of municipal ownership on labor conditions and politics in Great Britain and the United States.

See also J. R. Commons, "Labor and politics."

— Municipal and private operation of public utilities: relative to the labor report of the National civic federation committee on public ownership and operation. New York, 1908. 128 pp.

A reply to criticism of his "The labor report."

WILLIAMS, ARTHUR. Municipal ownership costly and dangerous. Moody's Magazine, ii, 643-649 (1906).

*In* Municipal ownership and operation: symposium. Experience in various places shows that private operation is cheaper and there is less political danger.

— Municipal ownership of public utilities. (*In* Y. M. C. A., New York, West Side Branch. Public utility economics. New York, 1914.) 31-44.

Includes brief reference to the alleged unsuccessful results in different places.

#### UNITED STATES — GENERAL

ADAMS, A. D. Cost of municipal *vs.* private gas. Municipal Journal and Engineer, xv, 13-14 (1903).

Includes an analytical table of the average cost of gas in the private and municipal plants of each state.

— Gas rates in the United States. Municipal Journal and Engineer, xiii, 63-65 (1902).

ADAMS, H. C. Relation of municipal government to public works in the United States. Publications, American Economic Association, ii, 507-532 (1888).

*In* The relation of modern municipalities to quasi-public works. Report of an investigation of municipal ownership of gas; includes a table of prices charged.

American Academy of Political and Social Science. The relation of the municipality to the water supply: a symposium. *Annals of the American Academy of Political and Social Science*, xxx, 557-592 (1907).

For contents see p. 29.

BAKER, M. N. Municipal ownership and operation of water-works. *Annals of the American Academy of Political and Social Science*, lvii, 279-281 (1915).

— Waterworks. (*In* BEMIS, E. W. *Municipal monopolies*. 4th edition. New York, 1904.) 3-52.

A thorough comparative and critical study of municipal and private operation of waterworks in the United States. The writer favors municipal ownership; includes many tables of statistics.

BEARD, C. A. Municipal ownership. (*In* American city government. New York, 1912.) 218-241.

BEMIS, E. W. The latest electric light reports. (*In* *Municipal monopolies*. 4th edition. New York, 1904.) 183-285.

A thorough statistical comparison of municipal and private operation, the writer favoring municipal ownership. Includes many tables of statistics of operation and of rates.

— Municipal operation *vs.* private operation of municipal monopolies: United States. (*In* National Civic Federation. *Municipal and private operation of public utilities*. New York, 1907.) Pt. I, vol. i, 122-185.

An extended analysis of the results of municipal operation. The writer concludes that it is conclusively demonstrated that the municipal plants have done far better for taxpayer and consumer than have the private plants.

— Municipal ownership of gas in the U. S. Publications, American Economic Association, vi, 295-471 (1891).

Extensive study of results, with many tables of data and some discussion.

BRADFORD, E. S. *Municipal electric lighting*. Madison, 1906. 22 pp.

Wisconsin free library commission, Comparative legislation bulletin no. 5.

Includes statistics of municipal electric plants in various places.

BRADFORD, E. S. Municipal electric lighting. *Municipal Journal and Engineer*, xxiii, 213-217 (1907).  
Review of statistics and conditions in the United States; including the relative increase in municipal and private plants; with references and tables of statistics.

— Municipal gas lighting. Madison, 1906. 18 pp.  
Wisconsin free library commission, Comparative legislation bulletin no. 8.  
Includes statistics of municipal gas plants in various cities.

BURDETT, FREDERICK, and FORSTALL, A. E. Engineering matters: United States gas works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 537-567.

CAHOON, J. B. Municipal electric lighting opposed. *Municipal Affairs*, vi, 636-647 (1902).  
A critical analysis of the results of municipal operation in the United States; with a table of statistics.

COMMONS, J. R., and SULLIVAN, J. W. Labor and politics: United States gas works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 490-536.

— — — Labor and politics: United States water, gas and electricity. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 885-907.

— Municipal electric lighting. *Municipal Affairs*, i, 631-673 (1897).  
A thorough comparative and critical study of municipal and private operation in the United States. Includes many tables of statistics of operation and of rates. The writer favors municipal ownership.

— — — (*In BEMIS, E. W. Municipal monopolies*. 4th edition. New York, 1904.) 55-180.  
Reprint.

DURAND, E. D. Street railway franchises, public regulation and public ownership in the United States of America. *Royal Commission on London Traffic*, iv, 593-609 (1906).  
Comprehensive discussion and tabulation of the laws of various states.

FAIRLIE, J. A. Recent extensions of municipal functions in the United States. *Annals of the American Academy of Political and Social Science*, xxv, 299-310 (1905).

Municipal ownership: pp. 304-308. Brief account of recent municipal ownership and franchise history in the United States. Includes tables of the geographical distribution of municipal and private water and electric plants.

— Recent legislation on municipal functions in the United States. (*In Essays in municipal administration*. New York, 1908.) 145-163.

Municipal ownership: pp. 152-158. Revised reprint.

FRANCISCO, M. J. The business of municipalities and private corporations compared: data that proves municipal ownership waste exceeds corporate profit. Rutland, 1905? 136 pp. Many plants considered alphabetically by cities; only a sentence or two about each.

— Municipalities *vs.* private corporations: political and business management. Rutland, 1900. 172 pp.

"Tables showing cost of lights furnished by private companies and municipal plants, a list of municipal plants sold or abandoned, experience of municipalities, legal and editorial opinions."

— Municipal ownership: its fallacy, with legal and editorial opinions, tables and cost of lights as furnished by private companies and municipal plants. Rutland, 1893. 104 pp.

Arranged by cities, with only a few sentences about each.

GONDEN, H. J. Robbing Peter. *Public Service*, xvii, 37-38 (1914).

Discusses concealment in municipal plant reports.

GRAY, J. H. General history and legislation: United States gas works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 426-489.

— General history and legislation: United States waterworks. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 1-135.

GWINN, D. R. Water rates charged in 375 cities. Proc., American Waterworks Association, xxviii, 209-222 (1908).  
Discussion: 223-238. Tabulated results of a questionnaire.  
Rates of private plants: pp. 216-218; rates of municipal plants: pp. 219-222.

HARD, WILLIAM, and GRAY, J. H. General history and legislation: United States electricity works. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 665-748.  
Considers Chicago, Detroit and South Norwalk only.

HASKINS, C. W., and JOHNSON, J. F. The recent history of municipal ownership in the United States. Municipal Affairs, vi, 524-538 (1903).  
A general historical sketch. The writers conclude that the insufficient and controversial evidence makes a general decision impossible at present.

HENDERSON, C. R. Competitive waterworks. Proc., American Waterworks Association, xxviii, 519-524 (1908).  
Discussion: pp. 525-527. A brief account of competition by municipal plants in various cities, with discussion of the cause and results.

HOWE, F. C. Municipal ownership in America. (*In* The modern city and its problems. New York, 1915.) 165-175.

KOINER, C. W. Municipal ownership and operation of electric utilities on the Pacific coast. Proc., American Society of Municipal Improvements, 1914: 347-367.  
A brief discussion of the plants and operating results in various western cities; includes tables.

MARSTON, GLENN. Facts on municipal ownership in 268 towns and cities. Chicago, 1915. 32 pp.  
Alphabetical by cities; only a few sentences about each city.

— The fallacies of municipal ownership. Public Service, xiv, 107-108, 147-149, 187-188 (1913).  
A popular argument against municipal ownership, with brief discussion of the results in various places.

— 200 municipal ownership failures. Chicago, 1912? 29 pp.  
Arranged by cities, with only a sentence about each.

MARWICK, MITCHELL and COMPANY. Financial matters: United States electricity works. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. i, 803-844.  
Considers Allegheny, Chicago, Detroit and South Norwalk only.

— Financial matters: United States waterworks. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. i, 353-425.

MAURY, D. H. Engineering matters: United States waterworks. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. i, 159-352.

ROSEWATER, VICTOR. Municipal ownership of electric lighting. *Independent*, iv, 93-96 (1903).  
A brief but interesting account of the growth of the municipal ownership movement in the United States; with one table of statistics. The writer favors municipalization.

STEBBINS, THEODORE, and PHELPS, C. E., JR. Engineering matters: United States electricity works. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. i, 759-802.  
Considers Allegheny, Chicago, Detroit and South Norwalk only.

SULLIVAN, J. W., and COMMONS, J. R. Labor and politics: United States waterworks. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. i, 136-158.

U. S. Bureau of the Census. Street and electric railways, 1902. Washington, 1905. 439 pp.  
Franchises, public regulation and public ownership: pp. 126-148.  
— Street and electric railways, 1907. Washington, 1910. 575 pp.  
Foreign tramways and electric railways: pp. 300-323.

WARNER, G. E. Public ownership of lighting plant. *City Government*, vi, 50-52 (1899).  
On municipal ownership history in Rochester and elsewhere.

WHIPPLE, F. H. The cost of public lighting. (*In Municipal lighting.* Detroit, 1889.) 120-217.

Alphabetical, by cities.

— The ownership of central stations. (*In Municipal lighting.* Detroit, 1889.) 80-106.

Alphabetical by cities.

WILCOX, D. F. Street railway resettlements and negotiations for municipal ownership. *National Municipal Review*, iii, 745-751 (1914).

#### ALABAMA

##### *Birmingham*

GORDON, F. G. R. Municipal ownership in Birmingham. *Concerning Municipal Ownership*, ix, 174-175 (1916).

#### CALIFORNIA

WHITTLESEY, J. T. The success of municipal lighting plants in California. *Pacific Municipalities*, xxvii, 701-712 (1913); xxviii, 5-16 (1914).

##### *Alameda*

GOLDSWORTHY, A. D. Municipal electric lighting in Alameda, California. *American City*, xi, 144-146 (1914).

Brief description, illustrated with photographs.

KAHN, J. B. Alameda municipal electric light plant. *Journal of Electricity, Power and Gas*, xxxi, 455-460 (1913).

History and description, with photographs and statistics.

##### *Glendale*

ALLISON, LER. W. Glendale municipal electric lighting plant. *Power*, xlvi, 60-61 (1915).

A very brief account of the plant and its operating results.

##### *Palo Alto*

BYXBEE, J. F., Jr. Experience with the diesel-engine in the municipal power plant of Palo Alto, Calif. *Engineering and Contracting*, xlvi, 44-47 (1916).

Engineering description, with one photograph.

*Pasadena*

CARR, W. J. Does municipal ownership pay? Pasadena's success in municipal ownership and certain aspects of the enterprise. *Pacific Municipalities*, xxvii, 142-145 (1913).

KOINER, C. W. Pasadena's municipal light and power plant. *Annals of the American Academy of Political and Social Science*, lvii, 209-227 (1915).

Historical account, with tables of rates charged. Favors municipal ownership.

SLAVIN, MATTHEW. Municipal electricity in Pasadena. *Public Service*, viii, 105-108 (1910).

*Riverside*

BACKSTRAND, C. F. Riverside's municipal power plant. *Journal of Electricity, Power and Gas*, xxx, 153-155 (1913). Engineering description, with photographs.

*San Francisco*

BALDWIN, A. S. Shall San Francisco municipalize its water supply? *Municipal Affairs*, iv, 317-328 (1900).

A popular analysis, opposing municipal ownership under the existing circumstances.

CLEARY, A. J. Municipal street railways. *Engineering News*, lxxiii, 320-324 (1915).

In a series of articles entitled "The municipal engineering works of San Francisco."

A good description, illustrated with photographs and diagrams, and including some statistics.

— San Francisco's new municipal street railways. *Engineering News*, lxxii, 1020-1022 (1914).

An engineering description, illustrated with a photograph and map.

OST, P. J. The municipal railways of San Francisco. *Journal of Electricity, Power and Gas*, xxxiii, 333-340 (1914).

Description, illustrated with photographs.

WALCOTT, E. A. The municipal railways of San Francisco. *National Municipal Review*, iii, 554-556 (1914).

A brief analysis of results, the writer concluding that the undertaking has been a success.

*San Francisco* — continued.

ZUEBLIN, CHARLES. Municipal railway regulation. (*In American municipal progress*. Revised edition. New York, 1916.)

30-54.

San Francisco's municipal railway: pp. 52-54.

Brief historical sketch; very popular.

*Santa Clara*

MOORE, C. E. Experience with a municipal gas plant. *Public Service*, ii, 51-52 (1907).

History of municipal ownership in Santa Clara, with conclusions as to the general desirability of municipal ownership.

## CONNECTICUT

*Norwich*

JENSEN, M. E. Experiment conducted at Norwich, Conn. *New England Magazine*, n.s., xxxv, 338-342 (1906).

Description of the municipal plant, and analysis of results.

*South Norwalk*

WINCHESTER, A. E. South Norwalk's municipal electric works. *Annals of the American Academy of Political and Social Science*, lvii, 228-245 (1915).

Historical, with comparison of the private and municipal plants. Believes that success depends on local conditions.

*Wallingford*

PIERCE, A. L. Municipal lighting in Wallingford, Conn. *Municipal Affairs*, vi, 820-823 (1903).

Very brief historical sketch, with analysis of results.

## FLORIDA

*Jacksonville*

AUSTIN, C. C. Jacksonville municipal power plant. *Power*, xxxvii, 622-624 (1913).

Description, with photographs and diagrams.

BARRS, J. M. Municipal ownership in Jacksonville, Florida. *Proc., National Conference for Good City Government*, 1906: 257-265.

An analysis of the results of operation, the writer favoring municipal ownership.

*Jacksonville* — continued.

DEACON, W. G. *The truth about Jacksonville*. *Public Service*, xvi, 113-117 (1914).

Experience with the municipal electric plant; includes one photograph.

GORDON, F. G. R. *The Jacksonville municipal electric lighting plant*. *Concerning Municipal Ownership*, ix, 153-155 (1916). Analysis of results.

WORTHINGTON, THOMAS. *Regulation vs. municipal ownership*. *Public Service*, xvi, 23-25 (1914).

A popular argument against municipal ownership, with brief reference to the municipal plants of Jacksonville.

**GEORGIA**

COLLIER, W. R. *The sale of current to municipally owned distributing systems by central stations*. *Electrical Review and Western Electrician*, lxvii, 890-893 (1915).

Embodyes the results of a study in Georgia, illustrated with tables and charts.

*Atlanta*

BECK, H. C. *Atlanta's municipal waterworks*. *Public Service*, ii, 137-140 (1907).

A statistical analysis of results.

*Quitman*

CROWELL, F. B. *Quitman municipal water and light plant*. *Power*, xlivi, 786-787 (1916).

Description, with photographs and tables.

**IDAHO**

WALKER, H. B. *Government furnishes cheap electricity*. *Power*, xli, 228-229 (1915).

Electricity sold to small towns in southern Idaho by a government hydroelectric plant, which forms part of the Minidoka irrigation project. Gives tables of rates charged.

**ILLINOIS**

*Illinois Bureau of Labor Statistics. Report, 1898*. Springfield, 1899. 271 pp.

Private and municipal ownership of public works: pp. 3-41.

NORTON, W. J. Illinois public utility commission law and municipal ownership law: with annotations, marginal notes and index digest. Chicago, 1913. 200 pp.

*Chicago*

COMMONS, J. R. Economic and social factors in Chicago municipal lighting. *Municipal Affairs*, vi, 109-115 (1902).

An historical analysis, with conclusions favorable to municipal ownership; includes tables of statistics.

DARROW, C. S. The Chicago traction question. *International Quarterly*, xii, 13-22 (1905).

History of street railways in Chicago, and of the municipal ownership movement.

DUNNE, E. F. Municipal ownership in Chicago. *Moody's Magazine*, ii, 522-526 (1906).

*In Municipal ownership and operation: symposium.*

Popular, historical account of the attempt to municipalize traction in Chicago. Favors municipal ownership.

ELLICOTT, E. B. Chicago's experience with municipal lighting. *Municipal Affairs*, vi, 815-820 (1903).

Popular historical and analytical treatment.

— Chicago's lighting plant: its progress under municipal ownership. *Municipal Engineering*, xx, 33-35 (1901).

Abstract. An account of the results of municipal ownership in Chicago; the writer favoring municipalization.

— Municipal electric lighting in Chicago. *Engineering Record*, xlivi, 176-180 (1901).

Brief abstract of a report of thirteen years' operation.

— The Robert A. Waller municipal lighting plant. *Journal of the Western Society of Engineers*, v, 566-569 (1900).

Discussion: pp. 569-570. A brief engineering description.

— Thirteen years' experience with municipal street lighting at Chicago, Ill. *Engineering News*, xlvi, 317 (1901).

Very brief abstract of a report of thirteen years' operation.

FAIRLIE, J. A. The Chicago street railways: a supplementary note. *Quarterly Journal of Economics*, xxii, 476-479 (1908). Supplementary to "The street railway question in Chicago."

*Chicago* — continued.

FAIRLIE, J. A. The street railway question in Chicago. *Quarterly Journal of Economics*, xxi, 370-403 (1907).  
A thorough historical study.

— — — (*In Essays in municipal administration*. New York, 1908.) 230-261.  
Reprint.

GROSSER, H. S. The movement for municipal ownership in Chicago. *Annals of the American Academy of Political and Social Science*, xxvii, 72-90 (1906).  
Some detailed historical account.

HEILMAN, R. E. Chicago traction: a study of the efforts of the public to secure good service. *Publications, American Economic Association*, 3d series, ix, 313-443 (1908).  
Thorough historical study of the history of Chicago traction, franchises, and the municipal ownership movement.

MEAD, D. W. The cost of furnishing water with reference to rates and rate making. *Proc., American Waterworks Association*, xxx, 92-96 (1910).

Discussion: pp. 96-109. A brief comparison and discussion of the water rates of private and municipal supply in Chicago, 1901-1902; includes tables of statistics.

#### *Galena*

THOMPSON, H. A. Galena's experience with ownership. *Public Service*, v, 91-92 (1908).

#### *Galesburg*

HODGE, W. H. Ownership that does not pay. *Public Service*, iv, 99-104 (1908).

Description and analysis of results; with photographs.

#### *Peoria*

PERRY, H. S. A city that sold its waterworks. *Public Service*, iv, 21 (1908).

A popular historical sketch of the plant under municipal and private ownership.

#### *Springfield*

SMITH, J. E. Experiments at Springfield, Ill. *Public Service*, i, 104-106 (1906).

## INDIANA

GORDON, F. G. R. Municipal ownership failures in Indiana. Concerning Municipal Ownership, ix, 127-128 (1916). Madison, Marion and Muncie.

*Fort Wayne*

WILLIAMS, F. H. Fort Wayne's municipal lighting plant. Municipal Journal and Engineer, xxvi, 285-289 (1909).. A description, illustrated with photographs.

*Indianapolis*

POTTS, A. F. A successful substitute for municipal ownership. Municipal Engineering, xiv, 181-187 (1898). An account of the Consumers' gas trust of Indianapolis.

— — — American Monthly Review of Reviews, xx, 576-578 (1899).

*Knightstown*

SUTTON, W. E. Ownership in a small community. Public Service, iii, 133-134 (1907). On municipal ownership of electric light and waterworks plants in Knightstown.

*Logansport*

GARDINER, H. M. Discord in municipal ownership. Public Service, v, 40-41 (1908). Current history.

— — Electric plant of Logansport, Ind. Public Service, ii, 77-80 (1907).

A brief sketch of municipal ownership history.

LOFTUS, D. J. Logansport, Indiana, electric light department. Proc., National Conference for Good City Government, 1906: 254-256.

Very brief historical sketch.

## IOWA

*Cedar Rapids*

LAZELL, F. J. Municipalizing a water plant. Public Service, iii, 135-136 (1907).

*Dubuque*

MCLEAN, CHARLES. Dubuque's public ownership predicament. *Public Service*, i, 53-54 (1906).

*Waterloo*

MARSTON, A. The valuation for city purchase of the property of the Waterloo (Ia.) waterworks co. *Engineering News*, lxi, 424-425 (1909).

Includes tables of data.

**KANSAS***Kansas City*

MORGAN, P. W. Municipal water and light plant of Kansas City, Kansas. *Municipal Engineering*, xlviii, 284-285 (1915). History and some discussion; illustrated with photographs.

WOOTAN, J. B. Kansas City, Kansas, m. o. light plant is crowding Cleveland as prize failure. *Public Service*, xx, 38-40 (1916).

Analysis of operating results.

*Sylvan Grove*

SENG, A. W. Selling water at a profit. *Municipal Engineering*, xliv, 580-582 (1913).

A description of the Sylvan Grove municipal water and light plant.

*Topeka*

SMUCKER, L. L. Topeka's unsuccessful lighting plant. *Public Service*, i, 79-80 (1906).

**KENTUCKY***Henderson*

DANNETTELL, G. W. Gas ownership in a Kentucky city. *Public Service*, iii, 77-79 (1907).

**LOUISIANA***Donaldsonville*

IVENS, E. M. Donaldsonville, La., electric light and waterworks plant. *Power*, xxxix, 432-435 (1914).

An engineering description, illustrated with photographs and diagrams.

*New Orleans*

DODGE, L. A. The public belt railroad of New Orleans. American City, v, 328-331 (1911).  
A brief account with one photograph.

*Opelousas*

JONES, A. C. Light and water plant of Opelousas, Louisiana. Municipal Engineering, xlvii, 202-206 (1914).  
A popular historical account of operation and management difficulties; with one photograph.  
— Opelousas' municipal lighting plant. Power, xli, 41-42 (1915).  
Description of the plant, illustrated with photographs.

## MASSACHUSETTS

ADAMS, A. D. Cost of light in municipal and private gas and electric plants. Municipal Engineering, xxiii, 160-164 (1902).  
A statistical comparison of the cost in Massachusetts.  
— Equipment and operation of municipal electric light plants in Massachusetts. Municipal Engineering, xxiii, 434-436 (1902).  
An historical statistical study.  
— Investments and earnings of municipal electric plants. Municipal Engineering, xxiv, 344-348 (1903).  
A comparison of municipal and private plants in Massachusetts, with tables of statistics.  
—, and PRITCHARD, C. F. Massachusetts electricity works. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. i, 909-1213.  
— Municipal gas and electric plants in Massachusetts. Journal of Political Economy, x, 214-229 (1902).  
Historical and analytical treatment; with tables.  
— — Political Science Quarterly, xvii, 247-255 (1902).

*Attleborough*

BECKHARD, BRUNO. Attleborough, an object lesson. Arena, xl, 100-104 (1908).  
A popular article, composed chiefly of quotations from the current reports.

*Boston*

CONANT, W. B. Municipal water plant derives income from water power. *Municipal Engineering*, xlix, 117 (1915).

An account of the sale of power from the Sudbury station of the Boston metropolitan waterworks.

WINSLOW, WILLARD. Boston's new subway. *Municipal Affairs*, v, 427-432 (1901).

*Holyoke*

ADAMS, A. D. The Holyoke case. *Quarterly Journal of Economics*, xvii, 643-668 (1903).

The writer asserts that municipal ownership was forced on Holyoke by a court decision, and that as a result an unreasonably high purchase price was paid.

MARSTON, GLENN. Holyoke's municipal lighting finances. *Concerning Municipal Ownership*, iii, 87-89 (1908).

*North Brookfield*

POWELL, F. W. Two experiments in public ownership of steam railroads. *Quarterly Journal of Economics*, xxiii, 137-150 (1908).

Troy, N. Y., and North Brookfield, Mass.

The writer states that the first was a failure; the second a success.

*Taunton*

ADAMS, A. D. The largest municipal electric plant in New England. *Electrical Review and Western Electrician*, xlvi, 363-367 (1905).

Engineering description, illustrated with photographs and diagrams.

## MICHIGAN

*Detroit*

BEMIS, E. W. Detroit's efforts to own her street railways. *Municipal Affairs*, iii, 473-490 (1899).

DALY, W. M. Public lighting plant of Detroit, Mich. Proc., American Society of Municipal Improvements, 1907: 109-115.

A brief historical sketch and analysis of results.

*Detroit* — continued.

FAIRLIE, J. A. Municipal electric lighting in Detroit. *Municipal Affairs*, iv, 606-613 (1900).

Brief statistical analysis and comparison with other cities, favorable to municipal ownership under the existing conditions.

— (In *Essays in municipal administration*. New York, 1908.) 219-229.

Revised reprint.

INGRAM, F. F. Municipal lighting in Detroit. *Municipal Affairs*, vi, 823-825 (1903).

— Municipal operation in Detroit. *Proc., National Conference for Good City Government*, 1906: 249-253.

Brief analysis of the results of the municipal lighting plant, the writer favoring municipalization.

— Should the people or the corporations light our cities? *Arena*, xxx, 392-400 (1903).

An argument for municipal ownership, illustrated by a comparison of municipal and private management in Detroit.

LOCKWOOD, J. E. Analysis of municipal electric lighting in Detroit. *Municipal Affairs*, vi, 825-834 (1903).

A detailed statistical analysis, the conclusions being favorable to municipal ownership.

WILSON, THOMAS. Detroit's municipal lighting plant. *Power*, xl, 832-835 (1914).

A description of the plant, with an historical sketch and operating statistics; illustrated with a photograph and diagram.

*Grand Rapids*

FOOTE, MARK. Grand Rapids' municipal water plant. *Public Service*, ii, 37-40 (1907).

An historical sketch; the writer opposes municipal ownership.

— Grand Rapids to quit city lighting. *Public Service*, ii, 136-137 (1907).

A brief historical sketch.

*Kalamazoo*

WILSON, THOMAS. Kalamazoo municipal plant. *Power*, xli, 218-224 (1915).

An engineering description of the municipal street lighting plant, with photographs and diagrams.

*Ypsilanti*

HATCH, W. B. A successful fight for a municipal gas plant.  
*American City*, xii, 49-52 (1915).

## MINNESOTA

GESSELL, G. A. Minnesota public utility rates: gas, electric,  
 water. Minneapolis, 1914. 254 pp.

University of Minnesota, Current problems, no. 3.  
 Lists cities under municipal ownership: pp. 1-4.

*Duluth*

CASE, L. N. Municipal operation in Duluth, Minn. Proc.,  
 National Conference for Good City Government, 1906: 244-  
 248.

A brief discussion of the history and results of operation of the municipal  
 water and gas plants, the writer favoring municipal ownership.

## MISSOURI

*Kansas City*

KEITH, JOHN. Kansas City's waterworks fiasco. *Public Service*,  
 i, 77-79 (1906).

A brief historical sketch, under private and municipal ownership.

*St. Louis*

BECKHARD, BRUNO. Municipal lighting in St. Louis. *Arena*,  
 xxxix, 470-472 (1908).

A very brief historical sketch.

CASEY, C. C. Municipal lighting at St. Louis. *Municipal Journal* and *Engineer*, xxiv, 209-211 (1908).

A description of the plants, illustrated with photographs.

## NEBRASKA

*Fremont*

BREMERS, H. J., JR. Municipal light and water plant at Fremont,  
 Neb. *Municipal Engineering*, lxv, 119-121 (1913).

A description of the plant, with one photograph.

*Omaha*

MAYO, E. W. Omaha's experience. *Moody's Magazine*, ii, 659-  
 662 (1906).

*In* Municipal ownership and operation: symposium.  
 History of municipal ownership and accompanying litigation: opposes  
 municipalization.

## NEW YORK

CAWCROFT, ERNEST. The constitutional convention and New York's fiscal policy. *Moody's Magazine*, xviii, 183-186 (1915).

On the municipal powers and constitutional changes needed in New York state to aid municipal ownership.

*Camden*

PHELPS, L. F. Municipal lighting plant operated by oil engine. *Municipal Engineering*, xliv, 311-312 (1913).

*New York*

BLAKE, A. D. New York City's power problem. *Power*, xxxviii, 286-290 (1913).

A description of the Hall of records power plant, which supplies a group of municipal buildings; illustrated with photographs and a diagram.

COLER, B. S. Shall New York own its subways? New York's debts and assets. *Outlook*, lxxix, 934-938 (1905).

An account of the financial obstacles to constructing great public works, with suggestions for overcoming them; popular.

See also R. F. Cutting, "Shall New York own its subways?"

CUTTING, R. F. Shall New York own its subways? A calm view of the rapid transit situation. *Outlook*, lxxix, 931-934 (1905).

A brief historical sketch of the building of the New York subways, and a consideration of the possibility of municipal operation of future subways; popular.

See also B. S. Coler, "Shall New York own its subways?"

FOOTE, A. R. No government should operate an industry. *Municipal Affairs*, i, 245-289 (1897).

A reply to E. M. Grout, "New York City should own the gas supply."

GROUT, E. M. New York City should own the gas supply. *Municipal Affairs*, i, 225-244 (1897).

A popular study.

For a reply, see A. R. Foote, "No government should operate an industry."

SEABURY, SAMUEL. Municipal ownership and operation of public utilities in New York City. New York, 1905? 202 pp. Historical, by kind of utility.

*New York* — continued.

WARNER, J. DEW. Should greater New York operate its street railways? Yes. *Municipal Affairs*, i, 421-457 (1897). A popular, annotated study.

WHITNEY, E. B. Public ownership in New York. *International Quarterly*, xii, 1-12 (1905).

History of the movement for municipal street railways in New York.

*Rochester*

CUTLER, J. G. Municipal control of public service corporations. *Proc., National Conference for Good City Government*, 1906: 291-297.

WARNER, G. E. Public ownership of lighting plant. *City Government*, vi, 50-52 (1899).

On municipal ownership history in Rochester and elsewhere.

*Syracuse*

HAMILTON, J. H. Syracuse water supply. *Municipal Affairs*, iv, 60-70 (1900).

History under private and municipal management, favoring municipal ownership.

HILL, W. R. City ownership of water supply. *Municipal Affairs*, vi, 730-737 (1903).

An historical account of the Syracuse waterworks under municipal and private operation.

*Troy*

POWELL, F. W. Two experiments in public ownership of steam railroads. *Quarterly Journal of Economics*, xxiii, 137-150 (1908).

Troy, N. Y., and North Brookfield, Mass.

The writer states that the first was a failure; the second a success.

OHIO

Public Service Publishing Company. Complete reports on municipally owned utility plants in the state of Ohio. Chicago, 1914. 11 pamphlets.

A series of very brief reports, each considering separately the plants in a number of cities. Includes balance sheets and some statistics.

*Cleveland*

BALLARD, F. W. The Cleveland municipal lighting plant. *Utilities Magazine*, i, no. 6, 9-16 (1916).  
History and analysis of results.

— The design and operation of the Cleveland municipal electric light plant. *Trans., American Society of Mechanical Engineers*, xxxvi, 649-676 (1914).  
Discussion: pp. 676-691. Includes photographs, tables and charts.

HOWE, F. C. Municipal ownership in Cleveland. *Moody's Magazine*, ii, 511-514 (1906).  
*In Municipal ownership and operation: symposium.*  
Traction history in Cleveland under Mayor Johnson. There is agitation only, because of no state provision for municipal ownership.

NEWCOMB, H. T. Cleveland's street railway problems. *Moody's Magazine*, ii, 507-510 (1906).  
*In Municipal ownership and operation: symposium.*

SPRINGBORN, W. J. Municipal electric lighting plants for Cleveland, Ohio. *Municipal Engineering*, xlvi, 14-15 (1914).  
On the results of operation of the plants.

— Municipal ownership of water plants. *Proc., Central States Waterworks Association*, 1913: 31-42.

WILLIAMS, A. D. Cleveland municipal electric plants. *Power*, xxxviii, 740-742 (1913).  
A description, illustrated with photographs and diagrams.

WILSON, H. W. Three cent light in Cleveland. New York, 1914. 11 pp.  
History and analysis of results of municipal ownership in Cleveland.

WOOTAN, J. B. The truth about Cleveland. *Public Service*, xx, 102-103, 105 (1916).  
Statistical analysis of the results of the municipal electric plant.

*Columbus*

HODGE, W. H. Columbus: a city in the dark. *Public Service*, i, 91-94 (1906).  
Description of the municipal street lighting in Columbus.

WILSON, THOMAS. City and state power plants at Columbus, Ohio. *Power*, xlvi, 322-326 (1915).  
A description of the various power plants, illustrated with photographs.

*Hamilton*

EGBERT, H. McC. Failure of municipal gas plant. *Public Service*, i, 15-16 (1906).

*Newark*

DEACON, W. G. The public utilities of Newark, Ohio. *Public Service*, xiv, 5-10 (1913).

History and description of the service, municipal and private; illustrated with photographs.

*Troy*

POOL, L. A. Municipal lighting plant of Troy, Ohio. *Municipal Engineering*, xliv, 197-201 (1913).

A description, with brief comment on financial results; illustrated with photographs.

## OKLAHOMA

BOZELL, H. V. Data on municipal plant operation in Oklahoma.

? , 1916. 85 pp.

Alphabetical, by cities.

## OREGON

*Eugene*

MARSTON, GLENN. Failure of municipal plants at Eugene, Ore. *Public Service*, xv, 63-65 (1913).

A popular analysis, the writer asserting that faulty accounting conceals the conditions; illustrated with photographs.

MEYERS, ALVIN. Eugene, Ore., municipal light and water plant.

*Municipal Engineering*, xliv, 427-428 (1913).

A description of the plant, with schedule of rates.

## PENNSYLVANIA

*Philadelphia*

HICKS, T. L. The Philadelphia gas works under private operation. *World Today*, xiii, 1037-1040 (1907).

A very brief, popular summary of the history of the Philadelphia gas plant under municipal and private operation.

MALTBIE, M. R. A tale of two cities: water supply in London and Philadelphia. *Municipal Affairs*, iii, 193-214 (1899).

An historical and comparative study of the private supply in London, and the municipal supply in Philadelphia, favoring municipal ownership; includes tables of statistics.

*Philadelphia* — continued.

ROBBINS, HAYES. Philadelphia and its gas works: an instance of the advantages resulting from substituting private for municipal control of a public utility. *World Today*, vii, 1536-1542 (1904).

Illustrated with photographs; good.

ROGERS, J. I. Municipal gas in Philadelphia. *Municipal Affairs*, i, 730-744 (1897).

A popular historical account, answering the claim of the leasing company that the municipal operation was inefficient. Includes tables of statistics.

ROWE, L. S. The municipality and the gas supply, as illustrated by the experience of Philadelphia. *Annals of the American Academy of Political and Social Science*, xi, 301-323 (1898). Historical, opposing the lease of the municipal gas plant to a private company. Includes tables of statistics.

— (In *Problems of city government*. New York, 1908.)  
241-270.

A good historical account of municipal and private ownership of gas in Philadelphia; includes tables of statistics.

— The relation of the city of Philadelphia to the gas supply. (In *National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. i, 588-664.

SPEIRS, F. W. The Philadelphia gas lease. *Municipal Affairs*, i, 718-729 (1897).

A popular account of the lease of the municipal plant, which the writer claims was due to politics, not to failure of municipal operation.

— Street railway system of Philadelphia: its history and present conditions. *Johns Hopkins University Studies in Historical and Political Science*, xv, 93-215 (1897).

Municipal ownership: pp. 83-91.

WILCOX, D. F. Municipal franchises: a description of the terms and conditions upon which private corporations enjoy special privileges in the streets of American cities. New York, 1910-1911. 2 vols.

On the lease of the Philadelphia municipal gas plant, see i, pp. 566-572.

*Philadelphia* — continued.

WOODRUFF, C. R. The Philadelphia gas works: a modern instance. *American Journal of Sociology*, iii, 601-613 (1898).

A popular account of the lease of the municipal gas plant, and the political measures employed.

— Recent street railway legislation in Pennsylvania and Philadelphia. *Municipal Affairs*, v, 419-426 (1901).

Brief account of current legislative corruption.

#### *Tarentum*

HUDSON, LEO. An interesting example of direct competition between publicly and privately owned waterworks plants in Tarentum, Pa. *Engineering and Contracting*, xliv, 162-163 (1915).

#### SOUTH DAKOTA

#### *Brookings*

SORENG, E. M. Cost figures from Brookings, S. D. *Electrical World*, lxii, 1321 (1913).

A description of the municipal electric light plant, illustrated with photographs.

#### TENNESSEE

#### *Nashville*

HEAD, J. M. One mayor's experience. *Proc., National Conference for Good City Government*, 1906: 269-276.

A popular account of the agitation for municipal ownership in Nashville and of its effects, the writer favoring municipalization.

WATSON, C. C. Nashville's deteriorated waterworks. *Public Service*, iii, 101-103 (1907).

Description and history, illustrated with photographs.

#### TEXAS

#### *Terrell*

KELLEY, EDWARD. Operating a central station against municipal competition. *Public Service*, xv, 33-36 (1913).

#### VERMONT

#### *Burlington*

MARSTON, GLENN. Municipal electric competition, Burlington, Vt. *Public Service*, vi, 69-70 (1909).

Description, with photographs and some discussion.

*Burlington* — continued.

MARSTON, GLENN. Municipal ownership in Burlington, Vermont. *Concerning Municipal Ownership*, iv, 71-72 (1909). An analysis of results of operation of the municipal electric light plant.

*St. Albans*

RENNER, C. J. The experience of a small city with water meters and water rates. *American City*, xi, 474-478 (1915). Illustrated with tables and charts.

VIRGINIA

*Danville*

ROGERS, W. O. Danville municipal lighting plant. *Power*, xlili, 572-577 (1916). Engineering description, with photographs, diagrams and tables.

*Richmond*

WOOTAN, J. B. Richmond street lighting plant. *Public Service*, xxi, 170-173 (1916). An analysis of results.

WASHINGTON

*Seattle*

DEACON, W. G. Toll of politics. *Public Service*, xvii, 71-72, 82 (1914). A popular discussion of results of municipal electric lighting in Seattle.

GRAMBS, W. J. The inefficiency of municipal ownership. *Stone and Webster Public Service Journal*, xvii, 321-348 (1915). History and analysis of municipal ownership in Seattle.

KIDSTON, W. L. Seattle municipal lighting plant. *Power*, xli, 182-185 (1915). An engineering description, with photographs and diagrams.

MARSTON, GLENN. Electric rates in Seattle, Wash. *Public Service*, xv, 27-30 (1913). An analysis of the results of operation of the municipal electric plant, with charts.

— Seattle, Wash., municipal electric plant. *Public Service*, xvi, 63-66 (1914).

Reply to criticism of his previous article.

*Seattle* — continued.

PARKER, A. M. The first municipal street railway in America. *Independent*, lx, 1153-1157 (1906).  
 A brief description of the West Seattle municipal railway; illustrated with photographs.

Ross, J. D. The municipal lighting plant at Seattle, Wash. *Municipal Engineering*, xlv, 464-467 (1913).  
 A brief description, with a diagram and photograph.

— Seattle, Wash., municipal light and power plant. *Municipal Engineering*, xliv, 556-560 (1913).  
 A description of the plant and its operation, with tables of rates charged; illustrated with a photograph and chart.

*Spokane*

MARSTON, GLENN. Spokane, Wash., waterworks heavy loser. *Public Service*, xv, 101-103 (1913).  
 A brief analysis of the results of municipal operation.

*Tacoma*

RICHARDS, R. H. Tacoma's Nisqually River development. *Electrical World*, lxii, 227-229 (1913).  
 An engineering description of the municipal hydroelectric station, illustrated with photographs.

## WEST VIRGINIA

*Wheeling*

DEACON, W. G. Sale of Wheeling gas plant urged. *Public Service*, vi, 115-117 (1909).

LYONS, B. F. Municipal ownership. *Progressive Age*, xxiv, 39-46 (1906).  
 Discussion of method of studying results of existing municipal plants, with analyses of the results in Wheeling, Manchester and Sheffield for illustration.

— Municipal ownership of gas works. *Municipal Engineering*, xxx, 49-58 (1906).

## WISCONSIN

LARSON, C. M. State regulation of municipally owned plants. *Journal of the American Waterworks Association*, ii, 515-537 (1915).  
 On the benefits of regulation, especially as to service. Illustrated by results in Wisconsin; with tables of statistics.

*Chippewa Falls*

GORDON, F. G. R. Chippewa Falls defeats municipal ownership.  
Concerning Municipal Ownership, ix, 103-105 (1916).

*Madison*

HEIM, J. B. Municipal ownership of waterworks. Municipal  
Engineering, xvii, 87-90 (1899).  
History of the municipal waterworks of Madison.

*Milwaukee*

BERNHARD, F. H. Milwaukee's new municipal lighting system.  
Municipal Journal, xl, 645-648, 683-685 (1916).  
Engineering description, illustrated with photographs.

## AUSTRIA

FAIRLIE, J. A. Municipal government in Vienna. (*In Essays in  
municipal administration.* New York, 1908.) 316-329.  
Discusses municipal ownership briefly (pp. 323-329).

## BELGIUM

WINSLOW, A. A. City ownership of street cars in Liége. U. S.  
Consular Reports, lxv, no. 246, 332-334 (1901).  
A brief account of the city purchase and leasing of the tramways.

## CANADA

BEECHER, H. W. Kamloops' steam turbine power plant. Mu-  
nicipal Journal, xxxvii, 592-594 (1914).  
An engineering description, illustrated with photographs.

BOLTON, R. P. Cheap electricity in Toronto. Concerning Mu-  
nicipal Ownership, ix, 8-10 (1916).  
Supplementary to "Our interest in Canadian operations."

— Favoritism in rates. Concerning Municipal Ownership,  
viii, 278-281 (1915).  
Supplementary to "Our interest in Canadian operations."

— The financial methods of the power commission. Concer-  
ning Municipal Ownership, viii, 230-233 (1915).  
Supplementary to "Our interest in Canadian operations."

— General results of public operation in Ontario. Concerning  
Municipal Ownership, ix, 62-63 (1916).  
Supplementary to "Our interest in Canadian operations."

BOLTON, R. P. Government electric railways. *Concerning Municipal Ownership*, viii, 254-257 (1915).  
Supplementary to "Our interest in Canadian operations."

— Our interest in Canadian operations. *Concerning Municipal Ownership*, viii, 206-209 (1915).  
On the hydroelectric power commission of Ontario.

CHACE, W. G. Winnipeg municipal electric system. *Engineering News*, lxviii, 12-20 (1912).  
Engineering description, with diagrams and photographs.

CHRISTIE, A. G. Calgary's municipal power plant. *Power*, xlivi, 352-357, 389-390 (1916).  
Chiefly descriptive, but includes brief discussion of rates and operation.  
Illustrated with diagrams and photographs.

— Lethbridge municipal power plant. *Power*, xlivi, 462-466 (1916).  
Description, with photographs, tables and a diagram.

— Municipal electrical utilities of western Canada. *Power*, xlivi, 378-381 (1916).  
A brief survey of equipment and itemized production costs, including tables and conclusions from investigation.

— Municipal power plant at Medicine Hat. *Power*, xlivi, 138-142 (1916).  
Description, with photographs, diagrams and tables.

— Municipal power plant operated by Saskatoon, Canada. *Power*, xlivi, 606-609 (1916).  
Engineering description, with photographs, tables and a diagram.

— Regina municipal power plant. *Power*, xlvi, 776-781 (1915).  
Engineering description, illustrated with photographs and diagrams.

GORDON, F. G. R. The seamy side of a famous municipal enterprise. *Concerning Municipal Ownership*, ix, 30-32 (1916).  
Analysis of results in Winnipeg.

— The truth about Calgary. *Concerning Municipal Ownership*, ix, 6 (1916).  
Analysis of the results of the various municipal enterprises.

HARDENBURG, W. E. Calgary's municipal street railway. *Municipal Journal*, xxxix, 395-397 (1915).  
A description and discussion of operating results, illustrated with photographs.

HOCKEN, H. C. The hydroelectric system in Toronto. *Annals of the American Academy of Political and Social Science*, lvii, 246-253 (1915).

HOLLOWAY, W. R. Municipal ownership in Canada. *U. S. Consular Reports*, lxxv, no. 285, 971-972 (1904).  
Current statistics on municipal ownership in Canada.

MACLEAN, A. Municipal ownership in Edmonton. *Proc., American Waterworks Association*, xxix, 593-597 (1909).  
Discussion: pp. 597-608. An outline of the municipal activities of Edmonton.

MELLING, H. T. Operating costs for municipal gas engine plant. *Power*, xliv, 13-14 (1916).  
Description of plant and operation at Edmonton, illustrated with two photographs.

SARA, R. A. Another municipal electric plant supplying lighting current at 3 cents per kw.-hr., *Engineering News*, lxxii, 655-656 (1914).  
An account of the Winnipeg plant, with tables of rates and operating statistics.

FRANCE

HOLCOMBE, A. N. The electric lighting system of Paris. *Political Science Quarterly*, xxvi, 122-132 (1911).  
A good historical account of the municipal and private plants.

LEROY-BEAULIEU, PAUL. Public ownership in France. *North American Review*, cxcvii, 295-311 (1913).  
An historical analysis and discussion of various government industries in France, railroads and public utilities being included; opposes public ownership.

WHITTEN, R. H. The Paris subway system: with special reference to franchise terms and conditions. *Engineering News*, lxv, 70-75 (1911).  
An excellent description; includes a map.

## GERMANY

BARNES, C. E. Municipal tramways in Cologne. U. S. Consular Reports, lxviii, no. 258, 369-370 (1902).  
A very brief account of the municipal purchase and operation of the tramways.

BASSETT, E. M. Municipal ownership of public utilities in Germany. American City, viii, 364-366 (1913).  
Abstract.

BROOKS, R. C. The municipal gas works in Berlin. Yale Review, xiv, 361-373; xv, 24-39 (1906).  
Detailed historical study; with tables of data.

— Municipalization of the Berlin electric works. Quarterly Journal of Economics, xxx, 188-194 (1915).  
Brief historical account of the plant under private ownership, and of its recent municipal purchase.

DAWSON, W. H. Trading enterprises. (*In* Municipal life and government in Germany. London, 1914.) 208-259.  
A brief historical description of the various municipal trading enterprises, public utilities being treated only incidentally.

DUBOIS, J. T. Municipal electric light and power in Germany. U. S. Consular Reports, lxvi, no. 211, 546 (1898).  
A very brief list of cities in which the municipality owns, has built or leases the gas and electric plants. Of historical interest only.

FAIRLIE, J. A. Municipal conditions in some European cities. (*In* Essays in municipal administration. New York, 1908.) 303-315.  
Historical sketches of utility conditions in various German cities.

HEYN, E. T. The municipal ownership of street railways in Germany. American Monthly Review of Reviews, xxxv, 329-333 (1907).  
— Recent history of municipal ownership in Germany. Municipal Affairs, vi, 614-621 (1903).

HOWE, F. C. Socializing the means of transit. (*In* European cities at work. New York, 1913.) 177-188.  
A very popular account of municipal ownership of traction in Germany.

JAMES, E. J. Municipal gas and electricity in a typical German city — Halle, A/S. *Municipal Affairs*, iv, 574–594 (1900). History and analysis, with tables of data.

MEYER, H. R. Municipal ownership in Germany. *Journal of Political Economy*, xiv, 553–567 (1906). An annotated historical study, with tables of statistics. Street railways and electric lighting are discussed separately.

ROWE, L. S. Municipal ownership and operation of street railways in Germany. *Annals of the American Academy of Political and Social Science*, xxvii, 37–65 (1906). Good critical and historical account, with tables of statistics.

— (In *Problems of city government*. New York, 1908.) 281–329.  
Reprint.

TAWNEY, R. H. Municipal enterprise in Germany. *Economic Review*, xx, 423–437 (1910). A good economic analysis; with tables of statistics.

YOUNGMAN, ANNA. Frankfort-on-the-Main: a study in Prussian communal finance. *Quarterly Journal of Economics*, xxvii, 150–201, 329–372 (1913). Public utilities are discussed on pp. 332–343.

#### GREAT BRITAIN

ALDEN, PERCY. Municipal ownership. (In *Democratic England*. New York, 1912.) 192–214.

ASHLEY, PERCY. The water, gas and electric light supply of London. *Annals of the American Academy of Political and Social Science*, xxvii, 20–36 (1906). Historical account, each class of utilities treated separately; brief account of municipalization; tables of data.

AVEBURY, J. L. On municipal and national trading. New York, 1907. 177 pp. Discusses loss and profit from municipal public utility operation, pp. 73–89. The writer opposes municipalization.

BALMFORTH, OWEN. The progress of municipal government. *Westminster Review*, clxxi, 272–280 (1909).

BELL, Sir JAMES, and PATON, JAMES. Glasgow: its municipal organization and administration. Glasgow, 1896. 426 pp.  
Ch. v. Public lighting.  
xxvi. Corporation gas and electricity.  
xxviii. The corporation tramways.  
History and description of the services.

BELLAMY, C. R. Public transportation: with special reference to Liverpool tramways. *Municipal Affairs*, vi, 706-711 (1902).  
An historical account, with tables of statistics. Concludes that municipal ownership has been successful.

BEMIS, E. W. Street railways. (*In* Municipal monopolies. 4th edition. New York, 1904.) 505-583.  
An extensive historical study. The history of municipal ownership in Great Britain is described by cities, pp. 569-583.

BLAKE, H. W. Contrast between company and municipal ownership and management of public utilities. *Street Railway Journal*, xxvi, 28-31 (1905).  
Considers the results of municipal ownership in Great Britain, and applies them to conditions in the United States.

BOYLE, JAMES. Municipal socialism in England. *Municipal Journal and Engineer*, xiv, 267-269 (1903).

— Municipal socialism in Great Britain. *U. S. Consular Reports*, lxix, no. 262, 375-385 (1902).  
An account of the municipal enterprises in various cities, public utilities being discussed only incidentally.

— — Municipal Affairs, vi, 268-274 (1902).  
Reprint.

— — Municipal Journal and Engineer, xii, 244-245; xiii, 9-10 (1902).  
A discussion of municipal trading in Liverpool, public utilities being treated only incidentally.

British Board of Trade. The financial position of tramway undertakings: owned and worked by municipal corporations as indicated by the tramway and light railways return of the board of trade for 1908-1909. *Tramway and Railway World*, xxvii, 185-188 (1910).  
An analysis of English municipal ownership statistics; with tables.

BROOKS, SYDNEY. Public ownership abroad. *Concerning Municipal Ownership*, vi, 229-231 (1913); vii, 157-160, 181-183 (1914).

BURDETT, E. W. The agitation for municipal ownership in the United States: its origin, meaning and proper treatment. *Proc., National Electric Light Association*, 1906: vol. i, 537-555.

Includes an analysis of results of municipal ownership in Great Britain, which the writer believes less successful than commonly thought.

— Municipal ownership in Great Britain. *Journal of Political Economy*, xiv, 257-314 (1906).

An excellent and thorough study of results, with tables of statistics. The writer concludes that as a whole municipal ownership there has not been successful, and that success would not mean similar results in this country because of different conditions.

CHISHOLM, SAMUEL. *Municipal enterprises*. Glasgow, 1901.

70 pp.

Descriptive.

CLARK, W. J. British municipal tramway conditions. *Aera*, i, 658-664 (1913).

The writer concludes that British tramway fares are but little below ours, and without question unprofitable.

— British tramways. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. I, vol. i, 444-476.

A study of conditions and results of operation.

— The figures in the case. *Public Service*, iv, 89-94 (1908).

— Municipal ownership in Great Britain and in the United States. *Proc., American Street and Interurban Railway Association*, 1907: 271-284.

A comparison of English and American street railways, with analysis of results. The conclusions are strongly in favor of private operation.

COMMONS, J. R., and SULLIVAN, J. W. Labor and politics: British gas, electric supply and tramways. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. ii, 550-627.

COMMONS, J. R., and SULLIVAN, J. W. Labor and politics: gas, electric supply and tramways. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 1-112.

CRAWFORD, N. McD., and WOODWARD, J. H. Engineering matters: British tramways. (*In* National Civic Federation. Municipal and private operation of public utilities. New York, 1907.) Pt. II, vol. ii, 453-474.

CRAWFORD, ROBERT. Glasgow's experience with municipal ownership and operation. *Annals of the American Academy of Political and Social Science*, xxvii, 1-19 (1906). Good descriptive, historical and critical account.

DANIELS, C. N. Municipal ownership in Sheffield. *U. S. Consular Reports*, no. 294, 64-67 (1905). A brief statistical analysis.

DARWIN, LEONARD. Municipal trade: the advantages and disadvantages resulting from the substitution of representative bodies for private proprietors in the management of industrial undertakings. New York, 1903. 464 pp. An excellent analysis, with some discussion of results in Great Britain. Includes a few tables of statistics.

DONALD, ROBERT. The case for municipal trading. *Contemporary Review*, lxxxiii, 485-500, 623-639 (1903). An answer to various arguments against municipal ownership in Great Britain, with an analysis of results. Includes tables of statistics.

— Recent attacks on municipal ownership in Great Britain. *Municipal Affairs*, vi, 579-613 (1902). Historical and critical analysis, in answer to attacks on municipal ownership, which the writer asserts are stimulated by people interested in the companies. Includes many tables of statistics.

— Street railways in British towns: municipal systems compared with company enterprises. *Municipal Affairs*, iv, 31-39 (1900). A popular comparison of English municipal and private tramway operation, the conclusion being favorable to municipal ownership under British conditions of local government.

DONALD, ROBERT. Success of municipal ownership in Great Britain. *Street Railway Journal*, xxi, 30-35, 72-76 (1903). An answer to statements by certain opponents of municipal ownership, with illustrative statistics.

FAIRLIE, J. A. Municipal activities in Great Britain. (*In Essays in municipal administration*. New York, 1908.) 287-302. An historical discussion of municipal ownership in various cities.

GLASGOW (Corporation). Handbook on the municipal enterprises. Glasgow, 1904. 147 pp.  
Gas: pp. 112-114.  
Water: pp. 114-119.  
Electricity: pp. 120-124.  
Tramways: pp. 125-129.  
On the history and present status of municipal ownership in Glasgow.

GORDON, F. G. R. Street railways of Boston *vs.* the tramways of Glasgow. *Concerning Municipal Ownership*, viii, 201-204 (1915).  
The writer opposes municipalization.

GUYOT, YVES. Where and why public ownership has failed. New York, 1914. 459 pp.  
Operation of gas and electricity in the United Kingdom: pp. 127-135.  
Tramways in Great Britain: pp. 136-150.

HALE, R. S. Municipal ownership in England: the British problem considered from an American viewpoint. *Cassier's Magazine*, xxxii, 3-11, 178-185, 237-249 (1907).  
An analysis of the results of municipal ownership of various utilities.  
The writer concludes that the municipal enterprises in England are well run but with little initiative.

HAMLEN, E. W. Glasgow and its municipal tramways. *Moody's Magazine*, ii, 652-655 (1906).  
*In Municipal ownership and operation: symposium.*  
A brief comparison of Glasgow and Boston traction, favoring private ownership.

HAMM, W. C. City-owned street cars. *U. S. Consular Reports*, no. 286, 121-125 (1904).  
A brief historical sketch and description of the tramways in Hull, illustrated with photographs.

HAMM, W. C. City-owned street cars. *Engineering Record*, I, 173-176 (1904).

HOWE, F. C. *The British city: the beginnings of democracy.* New York, 1907. 370 pp.  
Ch. vi. The growth and extent of municipal trading.  
vii. The cities and the tramways.  
viii. The gas supply.  
ix. The electricity supply.  
The chapters listed give a popular survey of the history and management of municipal utilities in Great Britain. The writer favors municipal ownership.

— *Does municipal ownership pay? (In The city: the hope of democracy. New York, 1906.)* 136-157.  
A popular analysis of the results of municipal ownership in Great Britain, the writer favoring municipalization. Includes some tables of statistics.

— *European cities at work.* New York, 1913. 370 pp.  
Municipal ownership of the gas supply: pp. 328-333.  
Municipal transit in Great Britain: pp. 334-344.

— *Municipal ownership in Great Britain.* *Bulletin of the Bureau of Labor*, no. 62, 1-123 (1906).  
A thorough historical study and analysis; good. The writer favors municipalization.

JAMES, R. C., and TURNER, E. H. General remarks upon financial conditions. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 628-647.

KLUMPP, J. B., and WINCHESTER, A. E. Engineering matters: British electricity supply works. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 292-382.

KNOOP, DOUGLAS. *Principles and methods of municipal trading.* London, 1912. 409 pp.  
A thorough, critical and historical study.

LOWELL, A. L. *Municipal trading.* (*In The government of England.* 2d edition. New York, 1912.) ii, 233-267.  
A good general discussion of municipal trading, public utilities being treated only incidentally.

LYONS, B. F. Municipal ownership. *Progressive Age*, xxiv, 39-46 (1906).  
Discussion of method of studying results of existing municipal plants, with analyses of the results in Wheeling, Manchester and Sheffield for illustration.

— Municipal ownership of gas works. *Municipal Engineering*, xxx, 49-58 (1906).

McKERROW, H. G. Some results in municipal ownership in Great Britain. *Arena*, xxxvii, 387-395 (1907).  
A popular analysis of municipal ownership results in Great Britain. For a reply, see Frank Parsons, "Mr. McKerrow's argument against municipal ownership."

MAHIN, F. W. Nottingham municipal tramway. *U. S. Consular Reports*, lxxiv, no. 280, 82 (1904).  
On the results of operation; the writer considers municipal operation highly successful.

MALTBIE, M. R. Gas lighting in Great Britain. *Municipal Affairs*, iv, 538-573 (1900).  
A good historical study and analysis. Concludes that municipal ownership has been more successful than private.

— General history and legislation: British electricity supply works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. ii, 248-291.

— General history and legislation: British gas works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. ii, 113-161.

— General history and legislation: British tramways. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. ii, 383-452.

— Glasgow's municipal tramways. *Municipal Affairs*, iv, 40-59 (1900).  
A brief description and analysis, with tables of statistics.

— Municipal and private management of gas and electricity in Great Britain. (*In National Civic Federation. Municipal*

and private operation of public utilities. New York, 1907.) Pt. I, vol. i, 185-261.  
A detailed analysis of results.

MARSTON, GLENN. Municipal ownership in England. *Public Service*, xii, 45-46, 87-88, 187-188, 235-236 (1912).

General discussion, and history by cities. The writer concludes that municipal plants in England as a rule are failures both financially and as to service.

MAWDESLEY, R. T. Municipal electricity supply at Johannesburg. *Electrical Review* (London), lxxviii, 89-91, 100-101, 153-155, 165-166 (1916).

An engineering description, with photographs, diagrams and tables.

MEYER, H. R. Great Britain's lesson. *Moody's Magazine*, ii, 532-534 (1906).

*In* Municipal ownership and operation: symposium.

The writer asserts that lack of corruption in England is not a valid argument, for there was none before municipalization.

— Municipal ownership in Great Britain. New York, 1906.  
340 pp.

An historical and critical study. The author favors private ownership.

— — Journal of Political Economy, xiii, 481-505 (1905).

An historical and analytical study, with tables of statistics. The writer opposes municipal ownership. Summary of several chapters of his book by the same title.

— — Public Service, xxi, 89-91 (1916).

A brief selection from his book of the same title.

MINSHALL, T. H. London's electrical future. *Fortnightly Review*, lxxxix (new series, lxxxiii), 498-511 (1908).  
The history of the electrical supply of London, and its municipalization.

NEWBIGGING, WILLIAM, and KLUMPP, J. B. Engineering matters: British gas works. (*In* National Civic Federation. Municipal and private operation of public utilites. New York, 1907.) Pt. II, vol. ii, 162-207.

OWEN, MARK. Public ownership and the increase of taxation in Great Britain. *Concerning Municipal Ownership*, vi, 152-156 (1913).

PARSONS, FRANK. British tramway history. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. II, vol. ii, 699-747.

— British tramways. (*In National Civic Federation. Municipal and private operation of public utilities.* New York, 1907.) Pt. I, vol. i, 261-302.  
A detailed analysis of the results of operation.

— Glasgow's great record: a complete history of the pioneer experiment in municipal ownership of street car service in Great Britain. *Arena*, xxxii, 461-472 (1904).  
A popular account, with tables of statistics; favors municipal ownership.

— Mr. McKerrow's argument against municipal ownership. *Arena*, xxxvii, 396-400 (1907).  
A reply to H. G. McKerrow, "Some results in municipal ownership in Great Britain."

PEARSON, GEORGE. Municipal trading. *Electrical Engineer*, new series, xxiii, 753-757 (1899).  
An historical account and analysis with tables of statistics. The writer favors municipal ownership.

PERKINS, F. C. Municipal electric railways at Wellington, New Zealand. *Electrical Review*, xlvi, 247-250 (1906).  
A description, illustrated with photographs.

POMERENE, W. R. Observations on tramways in Great Britain. *Electric Traction Weekly*, vi, 1303-1307, 1333-1334, 1363-1365 (1910).  
Part I describes the Glasgow system, part II the Liverpool system, and part III the Manchester and Belfast systems. An interesting study and discussion.

PORTER, R. P. The dangers of municipal ownership. New York, 1907. 356 pp.  
An historical study of municipal ownership in Great Britain, with application of the conclusion to conditions in the United States.

— The dangers of municipal trading. London, 1907. 320 pp.  
An English reprint of "The dangers of municipal ownership," with two additional chapters.

PORTER, R. P. European and American methods and results compared. *Municipal Affairs*, vi, 539-578 (1902). A popular historical discussion and comparison of municipal ownership in Great Britain and private ownership in the United States; with tables of data. The writer strongly advocates private ownership.

— Failure of municipal ownership in England. *Street Railway Journal*, xx, 153-158, 310-314 (1902).

ROYSE, C. A. Will public ownership increase or diminish political corruption? *Arena*, xxxviii, 373-384 (1907). An historical sketch of political corruption in England from the earliest times. The writer concludes that public ownership of monopolies will decrease corruption.

SMITHSON, R. A. Municipal operation of tramways: some points of a committee's policy. *Tramway and Railway World*, 1906: 339-341. Discussion: pp. 341-347. On the municipal street railways of Leeds.

TAYLOR, BENJAMIN. Municipal Glasgow. *North American Review*, clxxxiv, 590-603 (1907). A popular analysis of the good and bad points of the different municipal activities. The writer states that "the more 'municipalizing' it becomes, the more its (tax) rates grow."

— The municipal ownership of tramways in the United Kingdom. *Cassier's Magazine*, xvi, 381-388 (1899). A popular analysis of municipal operation in various cities, with tables of statistics. The writer favors private ownership.

TOWLER, W. G. Socialism in local government. New York, 1909. 336 pp. A popular study of the increase in municipal socialism in Great Britain, the writer opposing municipal trading.

TURNER, E. H., and JAMES, R. C. Financial matters: British gas works. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. ii, 208-247.

— — — Financial matters: British tramways. (*In National Civic Federation. Municipal and private operation of public utilities*. New York, 1907.) Pt. II, vol. ii, 475-515.

WILLIAMS, E. E. How London loses by municipal ownership.  
North American Review, clxxxiii, 729-736 (1906).

WILSON, ALEXANDER. Presidential address: Institution of gas engineers, annual meeting, June, 1911. Journal of Gas Lighting, Water Supply and Sanitary Improvement, cxiv, 725-734 (1911).

A very good historical sketch of the Glasgow gas works under private and municipal management, and an engineering description of the plant. Includes diagrams and tables of statistics.

### ITALY

BACHI, RICCARDO. Public gas works in Italy. Municipal Affairs, iv, 595-605 (1900).

A brief historical account, various cities being discussed separately.

FAIRLIE, J. A. Municipal government in Italy. (*In Essays in municipal administration.* New York, 1908.) 330-349.

Includes a very brief discussion of public utilities and municipal ownership in various cities.

MAGRINI, EFFREN. Milan street railways. Municipal Affairs, vi, 116-123 (1902).

A description of the Milan system of municipal ownership and private operation, which is asserted to be a success. Includes tables of statistics.

### JAPAN

KATAGIRI, YOSHIO. Municipal electric road of Osaka. Municipal Journal and Engineer, xxvi, 171-173 (1909).

A brief description of the only municipal street railway in Japan; illustrated with a map and photographs.

### SWEDEN

ANDREASON, E. Substation of Stockholm municipal system. Electrical World, lxi, 1305-1308 (1913).

Description of plant and operating features, illustrated with photographs.

### SWITZERLAND

LIEBERKNECHT, A. Development of Zurich tramways. U. S. Consular Reports, lxv, no. 245, 236-237 (1901).

## REGULATION OF MUNICIPAL PLANTS

BAKER, M. N. Municipal ownership and operation of water-works. *Annals of the American Academy of Political and Social Science*, lvii, 279-281 (1915).  
Favors state supervision of municipal water plants.

ERICKSON, HALFORD. The advantages of state regulation. *Annals of the American Academy of Political and Social Science*, lvii, 123-162 (1915).  
The writer believes that municipally owned plants need regulation as much as do private.

FOOTE, A. R. Regulation and taxation of public service corporations. *Municipal Affairs*, vi, 749-764 (1902).  
The writer believes that municipal plants should be regulated and taxed the same as private plants.

HOLMES, F. L. State control of municipally owned plants. (*In Regulation of railroads and public utilities in Wisconsin. New York, 1915.*) 277-288.  
On the experience of the Wisconsin commission.

KING, C. L. Municipal ownership versus adequate regulation. (*In The regulation of municipal utilities. New York, 1912.*) 23-55.  
The writer believes that municipal plants should be regulated and that the expense of regulation will be no less than under private ownership.

LARSON, C. M. State regulation of municipally owned plants. *Journal of the American Waterworks Association*, ii, 515-537 (1915).  
On the benefits of regulation, especially as to service. Illustrated by results in Wisconsin, with tables of statistics.

SMITH, J. A. Effect of state regulation of public utilities upon municipal home rule. *Annals of the American Academy of Political and Social Science*, lxxi, 85-93 (1914).  
Opposes state regulation of municipal plants.

## **INDEX**



# INDEX

Abady, Jacques, Suggested testing regulations, 184.

Abell, H. C., Difficult problems commissions are endeavoring to solve, 9; Rates for electric service, 271.

Abendroth, H. G., Overhead charges in valuation, 224.

Accounting for depreciation, *see* Depreciation.

Accounting, uniform, 178 ff.

Achatz, R. V., Determination of unit prices on material, 215.

Ackerman, J. W., Municipal electrical conduit system of the city of Auburn, 82.

Actual cost, *see* Valuation, theories and methods.

Adams, A. D., Cause and results of municipal gas plants, 319; Cost of light in municipal and private gas and electric plants, 65, 260, 351; Cost of municipal *vs.* private gas, 28, 255, 319, 337; Equipment and operation of municipal electric light plants in Massachusetts, 65, 351; First electric light plant in Boston, 68; Gas rates in the United States, 28, 255, 337; Gas *vs.* electricity, 22, 65; The Holyoke case, 70, 352; Investments and earnings of municipal electric plants, 65, 351; A large lighting load in a small town, 70; Largest municipal electric plant in New England, 71, 352; Meter rents and minimum rates, 28, 255, 267; Municipal gas and electric plants in Massachusetts, 65, 351; The New York and Massachusetts commissions of gas and electricity, 65, 78, 162, 163; Rates for hydroelectric service, 271; Reasonable rates, 28, 194; Regulation of gas and electric rates in Massachusetts, 65, 162, 260; Street lighting contracts, 127.

Adams, A. D., and Pritchard, C. F., Massachusetts electricity works, 65, 351.

Adams, A. L., Principles governing the valuation of waterworks, 201; Valuation of waterworks, 201.

Adams, H. C., Municipal ownership and corrupt politics, 319; Relation of municipal government to public works, 28, 337; Tendencies in railway taxation, 300; Valuation of public service utilities, 201.

Adams, T. S., Valuation of railway property for purposes of taxation, 101, 300.

Aera, Topical discussion on rate of return, 293.

Agar, J. G., Problem of municipal ownership, 311; Shall American cities municipalize? 22, 326, 333.

Agency theory, *see* Valuation, theories and methods.

Akron, Ohio, 88.

Alabama, 47, 343.

Alameda, California, 48, 343.

Alden, Percy, Municipal ownership, 114, 367.

Allen, W. S., The gas supply and the public, 297, 326; Some problems of public ownership, 326; Street railway franchises in Massachusetts, 66, 137; Street railways, development of, in Massachusetts, 66; Taxes on street railway franchises, 300.

Allison, J. E., A criticism of theoretical depreciation, 234; Depreciation, 234; Ethical and economic elements in public service valuation, 201, 215; Finding fair value, 234; Rate calculations for electric light and power, 271; Rate of return, 293; Should public service properties be depreciated? 234; Work of public service commissions, 147.

Allison, LeR. W., Accounting system for electric companies, 178; Glendale municipal electric lighting plant, 48, 343.

Almert, Harold, Public utility regulation from the standpoint of the public and the engineer, 9; Valuing the property of public utilities, 201.

Alvord, J. W., A coöperative waterworks franchise, 59, 137; Depreciation, 234; Depreciation of public utility properties, 235; Equitable hydrant rentals, 290; Financial questions in waterworks valuations, 224, 231, 293; Fundamental principles of valuation, 201, 215; Necessary elements for waterworks valuation, 201; Notes on going

value and methods for its computation, 225. *See also*, Metcalf, Leonard.

American Academy of Political and Social Science, Control of municipal public service corporations, 3, 28;

Electric railway transportation, 3; Municipal ownership and municipal franchises, 132, 334; Public policies as to municipal utilities, 4; Relation of American municipalities to the gas and electric light supply, 29; Relation of the municipality to the water supply, 29, 338; State regulation of public utilities, 4.

American Economic Association, Committee on Public Finance, Relation of modern municipalities to quasi-public works, 29.

American Electric Railway Association, Report of committee on determining the proper basis for rates and fares, 286.

American Gas Institute, Report of committee on a uniform system of accounts for gas companies, 178.

American Society of Civil Engineers, Bibliography on valuation of public utilities, 17.

American Waterworks Association, Discussion of depreciation and a comparison of rates and bookkeeping methods of municipally and privately owned waterworks, 178, 235, 311.

Anderson, G. W., How to get rid of the reproduction cost theory, 216.

Anderson, William, The work of public service commissions, 78, 163.

Andreason, E., Substation of Stockholm municipal system, 126, 377.

Arguments against municipal ownership, 326 ff.

Arguments for municipal ownership, 319 ff.

Arkwright, P. S., Length of franchise, 144.

Armstrong, C. H., Depreciation and kindred matters, 235.

Arnold, B. J., City transportation: subways and railroad terminals, 54; Foundation principles of utility valuation, 49, 54, 76, 134, 135, 139, 201, 202, 212, 213; Franchise and legal matters, 49, 134; Report on the Chicago transportation problem, 55; Report on the transportation facilities of San Francisco, 49; Report on legal and franchise matters, San Francisco, 49, 134.

Arnold, B. J., Fleming, H. B., and Weston, George, Phases in the development of the street railways of Chicago, 55, 135, 161.

Ashley, H. W., Public policy and legal regulation of central station charges, 272; Public service electric rates, 272; Theories of electric current rate schedules, 272.

Ashley, Percy, Municipal policy and state control, 311; Water, gas and electric light supply of London, 114, 367.

Atkinson, A. S., Construction and depreciation, 235.

Atlanta, Georgia, 52, 346.

Attleborough, Massachusetts, 68, 351.

Auburn, New York, 82.

Austin, C. C., Jacksonville municipal power plant, 52, 345.

Austria, 109, 363.

Avebury, J. L., Effect of municipal trading on private enterprise, 326; Municipal trading, 326; On municipal and national trading, 115, 367.

Aylesworth, M. H., Franchises and public welfare, 127.

Ayres, A. U., Governmental regulation of securities issues, 189.

Bachi, Riccardo, Public gas works in Italy, 125, 377.

Backstrand, C. F., Riverside's municipal power plant, 49, 344.

Badger, H. R., Work of valuation of electric railway property, 220.

Baker, C. A., Influence of tariffs on electricity supply, 272.

Baker, C. W., Monopolies and the people, 30; What shall we do with municipal monopolies? 9.

Baker, J. N., Limitation of state control over the regulation of rates, 192; Limiting state regulation, 194.

Baker, M. N., Municipal franchises and contracts, 127; Municipal ownership, 311; Municipal ownership and operation of waterworks, 30, 338, 378; Waterworks, 30, 319, 338.

Baker, N. D., Discussion of constitutional protection in valuation, 192, 249; Municipal ownership, 22, 234.

Baldwin, A. S., Shall San Francisco municipalize its water supply? 50, 344.

Baldwin, H. deF., Determining franchise values, 231; Valuation of waterworks' special franchises, 202, 231.

Baldwin, R. N., St. Louis public service commission, 77, 163.

Baldwin, W. W., Railroad taxation, 300; Taxation of railroad property, 300.

Ballard, F. W., Design and operation of the Cleveland municipal electric light plant, 88, 357; Some essentials of appraisal work, 220.

Balmforth, Owen, Progress of municipal government, 115, 367.

Baltimore, Maryland, 64, 260.

Bard, E. F., Street railways of Chicago, 55.

Barham, A. W., The problem of the small consumer, 272.

Barker, Harry, How to appraise water rights, 202; Side lights on depreciation problems, 235.

Barnes, C. E., Municipal tramways in Cologne, 113, 366.

Barrow, W. M., State railroad commissions and the courts, 30, 194.

Barrs, J. M., Municipal ownership in Jacksonville, 52, 345.

Bassett, E. M., Municipal ownership of public utilities in Germany, 113, 366; Rapid transportation in the world's great cities, 22.

Bassett, G. B., Water meter rates, 290.

Battey, C. T., Electric freight in Massachusetts, 66.

Bauer, John, Control of return on public utility investments, 9, 147; Bases of valuation in the control of return on public utility investments, 216; Depreciation and rate control, 235; Depreciation formula of the American society of civil engineers, 235; Going value in connection with a physical appraisal: the New York rule, 225, 249; The idea of capitalization as applied to public service corporations, 178; Rents in public utility accounting, 178; Returns on public service properties, 268; Valuation of public service properties: actual cost *vs.* cost of reproduction, 216.

Baum, F. G., The best control of public utilities, 10, 272; Class rates for light and power systems or territories, 272.

Beale, J. H., and Wyman, Bruce, Basis of capital charges, 216, 249; General principles governing compensation, 268; Judicial review of commission action, 192; Railroad rate regulation, 22, 147; Rate of return, 293.

Beard, C. A., Commissions in American government, 147; Franchises and public utilities, 30, 132; Municipal ownership, 30, 311, 338.

Beck, H. C., Atlanta's municipal waterworks, 52, 346.

Beckhard, Bruno, Attleborough, an object lesson, 68, 351; Municipal lighting in St. Louis, 77, 354.

Beckjord, W. C., Rates for electric service, 273.

Beecher, H. W., Kamloops' steam turbine power plant, 109, 363.

Belfast, Ireland, 375.

Belgium, 109, 363.

Bell, Sir James, and Paton, James, Glasgow: its municipal organization and administration, 115, 368.

Bellamy, C. R., Public transportation: with special reference to Liverpool tramways, 115, 368.

Bemis, E. W., Cleveland, 88; Cleveland street railway settlement, 88, 141; Detroit's efforts to own her street railways, 71, 352; Franchise situation and the referendum in Cleveland, 89, 141; Gas, 22, 334; Latest electric light reports, 30, 255, 338; Municipal monopolies, 319; Municipal operation *vs.* private operation of municipal monopolies, 31, 338; Municipal ownership of gas, 31, 320, 338; Original cost as the chief basis for fair value, 216; Regulation or ownership, 320; Report upon the price of gas in Chicago, 55, 259; Some present day issues of public utility regulation, 10, 153; Street railway settlement in Cleveland, 89, 141; Street railways, 23, 334, 368; Treatment of land in rate cases, 233; Water meter rates, 290.

Bemis, E. W., and Ingram, F. F., How the people should acquire public utilities, 319.

Bennett, C. G., Illinois utilities commission and the waterworks companies, 53, 160.

Bercovitz, D., Continental systems of charging for current by contract, 23, 255.

Bergen, Frank, Restrictive legislation against public service corporations in New Jersey, 78.

Berglund, Abraham, Valuation of railroads in the state of Washington, 99, 214.

Berlin, Germany, 113, 366.

Bernhard, F. H., Milwaukee's new municipal lighting system, 108, 363.

Bettman, Alfred, Constitutionality of historical cost method, 216, 249; Theory of franchise values, 231.

Betts, G. W., Legal justification for differential rates, 273.

Betts, Philander, Organization of a public service commission, 147.

Bibliographies, 17 ff.

Biette, L., The metropolitan system of Paris, 112.

Binckley, G. S., Why appraisal is not valuation, 202.

Birmingham, Alabama, 47, 343.  
 Bissell, G. W., Depreciation of electrical properties, 235.  
 Blake, A. D., New York City's power problem, 83, 355.  
 Blake, H. W., Contrast between company and municipal ownership, 115, 327, 368; Problem of the five-cent fare, 78, 286.  
 Blood, W. H., Jr., Improvements in central station service, 23, 184.  
 Blue, F. K., Practical application of the self-adjusting standard for rate fixing, 268, 298; Public and public service corporations, 268; Rate fixing and appraisals, 268; Regulation of public utilities by competition in the securities market, 293.  
 Blue sky legislation, *see* Capitalization, control of.  
 Bolton, R. P., Cheap electricity in Toronto, 110, 266, 363; Favoritism in rates, 110, 266, 363; Financial methods of the power commission, 110, 363; General results of public operation in Ontario, 110, 363; Government electric railways, 110, 364; Our interest in Canadian operations, 110, 364.  
 Bonbright, J. C., Depreciation and rate control, 235.  
 Bond, Walter, Municipal trading, 327.  
 Bookkeeping, *see* Accounting, uniform.  
 Booth, W. H., Sinking fund charges, 236.  
 Borden, S. W., A safe energy rate for small central stations, 273.  
 Boston, Massachusetts, 68, 69, 70, 138, 261, 352.  
 Boston sliding scale, *see* Sliding scale.  
 Bourne, Jonathan, Jr., Evils of government ownership, 327.  
 Bowden, J. H., Standardization of tariffs, 273.  
 Bowden, J. H., and Tait, Fred, Equitable charging for the supply of energy by municipal electricity undertakings, 273.  
 Bowker, R. R., The piracy of public franchises, 83, 139; Public control, ownership or operation of municipal franchises, 23, 327, 335; State publications, 17.  
 Bowman, H. M., State railroad commissions, 31, 153.  
 Bown, C. E., Some defects in the present Pennsylvania statute on public utilities, 93, 167, 174.  
 Boyle, James, Municipal socialism in England, 115, 368; Municipal socialism in Great Britain, 115, 368.  
 Bozell, H. V., Data on municipal plant operation in Oklahoma, 93, 358.  
 Bradford, E. S., Municipal electric lighting, 31, 338; Municipal gas lighting, 31, 339.  
 Bradlee, H. G., Actual figures of existing street railways, 286; Profitable limit of a five-cent fare, 287.  
 Brady, A. W., Some phases of the franchise question, 127, 144.  
 Brady, J. E., Gas franchises and privileges, 127.  
 Brandeis, L. D., Central power station rates, 273; Experience of Massachusetts in street railways, 66; How Boston solved the gas problem, 68, 298; Interlocking directorates, 189.  
 Brashears, W. F., Denver waterworks controversy, 51; New York City's subway crisis, 83; Passing of three-cent fares, 89, 263; Three-cent car fares on trial, 89, 263.  
 Braxton, A. C., Virginia state corporation commission, 99, 168.  
 Breen, I. R., A municipal franchise is a valuable asset and should be so treated, 127.  
 Bremers, H. J., Jr., Municipal light and water plant at Fremont, 77, 354.  
 Briggs, W. W., Proposed dividend type domestic service rate, 273.  
 British Board of Trade, The financial position of tramway undertakings, 115, 368.  
 Britton, J. A., Accounting under utility regulation, 178.  
 Brockway, W. B., Electric railway accounting, 179.  
 Brookings, South Dakota, 97, 360.  
 Brooklyn Public Library, Books on municipal ownership, 17.  
 Brooks, R. C., The municipal gas works in Berlin, 113, 366; Municipalization of the Berlin electric works, 113, 366.  
 Brooks, Sydney, Public ownership abroad, 116, 369.  
 Brown, C. C., How a private gas company at Indianapolis is controlled in the public interest, 60, 137; A modern municipal franchise, 60, 133, 137; Some new provisions in a proposed franchise, 60, 137; Water rates and rentals, 290.  
 Brown, W. H., Public ownership and popular government, 327.  
 Brown, W. R., Municipal ownership and league organization, 320.  
 Bruère, Henry, Public utilities regulation in New York, 78, 164.  
 Brush, M. C., A great city system, 68.

Bryan, W. H., Appraisal and depreciation of waterworks, 202, 236; Going value as an element in the appraisal of public utility properties, 102, 169, 225, 249.

Bryce, James, The Philadelphia gas ring, 94.

Buffalo, New York, 82.

Bullard, J. E., Gas rates: flat rate unfair to company and consumer, 284; Rate systems from the central station solicitor's viewpoint, 273.

Bullock, C. J., Control of the capitalization of public service corporations in Massachusetts, 66, 189; Taxation of public utilities, 300.

Burdett, E. W., The agitation for municipal ownership in the United States, 116, 327, 369; Cause of municipal ownership agitation, 327; Municipal ownership in Great Britain, 116, 328, 369; Municipal ownership in the United States, 328.

Burdett, Frederick, and Forstall, A. E., Engineering matters: United States gas works, 31, 339.

Burdick, C. B., Valuation of waterworks plants, 202.

Burdick, R. H., Performance of diesel-engine plants in Texas, 97.

Bureau of Railway Economics, List of references on valuation of railways, 18; Railway economics: a collective catalogue of books, 18.

Bureau of Standards, *see* U. S. Bureau of Standards.

Bureau of the Census, *see* U. S. Bureau of the Census.

Burgess, Philip, Points of difference in waterworks franchises, 127; Some features of engineering appraisements of waterworks properties, 202; Water rates, 290.

Burlington, Vermont, 99, 360, 361.

Burnand, W. E., Low rates and the development of the central station service, 273.

Burnett, Douglass, Differential gas rates in Baltimore, 64, 260.

Burnett, H. R., The costs of electricity supply and their relation to charges, 273.

Burns, C. S., Determination of physical values, 203; Valuation of public utilities, 225, 236.

Burns, John, Municipal ownership a blessing, 320.

Busby, L. A., Regulation of public utilities, 10, 147, 148.

Butler, J. A., Milwaukee, 108; Street railway problem in Milwaukee, 109.

Butler, Pierce, Valuation of railway property for purposes of rate regulation, 203.

Butt, W. E., Bringing an old waterworks valuation up to date, 220.

Butterworth, W. C., Cost and price of gas in a small city, 109, 265.

Byxbee, J. F., Jr., Experience with the diesel-engine in the municipal power plant of Palo Alto, 48, 343.

Cadby, J. N., Regulating the quality of public utility service, 102, 169, 184; Standards for gas and electric service, 102, 169, 184.

Cahoon, J. B., A business argument against municipal ownership, 328; Municipal electric lighting opposed, 31, 255, 328, 339; State control of corporations, 10; Uniform accounting, 179.

Calgary, Canada, 110, 111, 266, 364, 365.

California, 47, 48, 49, 50, 134, 158, 159, 212, 258, 343, 344, 345.

Calkins, Grosvenor, Massachusetts anti-stock watering law, 66, 190.

Camden, New York, 82, 355.

Canada, 109, 110, 111, 112, 144, 266, 363, 364, 365.

Cannon, L. A., Electric franchises, 110, 144.

Capitalization, control of, 189 ff.

Carr, W. J., Does municipal ownership pay? 49, 344.

Carver, H. E., Continuous inventories, 220.

Case, L. N., Municipal operation in Duluth, 75, 354.

Casey, C. C., Municipal lighting at St. Louis, 77, 354.

Cavanaugh, H. B., Federal income tax law as applicable to electric railroads, 300.

Cawcroft, Ernest, The constitutional convention and New York's fiscal policy, 79, 355.

Cedar Rapids, Iowa, 62, 349.

Chace, W. G., Winnipeg municipal electric system, 110, 364.

Chappelle, C. C., Some problems of rate making, 273.

Charles, S. A., Meter locations and meter accounts, 179.

Chase, H. S., Depreciation in waterworks accounts, 236; Maintenance and depreciation charges, 179, 236, 312; Standard and uniform reports, 179.

Chicago, Illinois, 54 ff., 135, 136, 161, 212, 259, 347, 348.

Child, R. W., Where a theory fails, 236.

Chippewa Falls, Wisconsin, 108, 363.

Chisholm, Samuel, Municipal enterprises, 116, 369.

Christie, A. G., Calgary's municipal power plant, 110, 266, 364; Lethbridge municipal power plant, 110, 364; Municipal electrical utilities of western Canada, 110, 364; Municipal power plant at Medicine Hat, 111, 364; Municipal power plant operated by Saskatoon, 111; Regina municipal power plant, 111, 364.

Cincinnati, Ohio, 88.

Claffin, G. E., Depreciation accounting for small companies, 236.

Clark, F. C., State railroad commissions and how they may be made effective, 32, 148, 153.

Clark, J. M., Rates for public utilities, 284; Some neglected phases of rate regulation, 216, 293.

Clark, Walton, *see* Edgar, C. L.

Clark, W. J., British municipal tramway conditions, 116, 266, 369; British tramways, 116, 369; The figures in the case, 328, 369; Municipal ownership in Great Britain and United States, 32, 116, 328, 369; Public utilities here and abroad, 23, 335.

Class rates, *see* Rate schedules.

Cleary, A. J., Municipal street railways, 50, 344; San Francisco's new municipal street railways, 50, 344.

Cleveland, F. A., Municipal ownership as a form of governmental control, 312.

Cleveland, Ohio, 88, 89, 90, 91, 141, 142, 143, 213, 357.

Clews, Henry, Municipal ownership a delusion, 328.

Clough, E. B., Truth about Cleveland traction, 89, 263.

Cobleigh, C. F., Early electric railway experiments in Kansas City, 76.

Coburn, F. W., The crisis in street railway service, 287.

Coldwell, O. B., Analytical accounting for central station companies, 179.

Coleman, G. S., Special franchise taxation in New York, 79, 300.

Coler, B. S., Shall New York own its subways? 83, 355.

Collier, W. R., The sale of current to municipally owned distributing systems, 52, 259, 274, 312, 346.

Cologne, Germany, 113, 366.

Colorado, 51, 134, 160.

Columbus, Ohio, 92, 357.

Commission attitude as to valuation, 249 ff.

Commissioners, qualifications of, *see* Public service commissions: General works.

Commissions, public service, *see* Public service commissions.

Commissions, public utility, *see* Public service commissions.

Commons, J. R., Economic and social factors in Chicago municipal lighting, 55, 347; Labor and politics, 23, 335; La Follette railroad law in Wisconsin, 102, 169; Municipal administration of public utilities, 312; Municipal electric lighting, 32, 256, 320, 339; Wisconsin public utilities law, 102, 169.

Commons, J. R., and Sullivan, J. W., Labor and politics: British gas, electric supply and tramways, 117, 369, Gas, electric supply and tramways, 370, U. S. gas works, 32, 339.

Conant, W. B., Municipal water plant derives income from water power, 68, 352; Street railway obligations to repair and maintain public ways, 300.

Comat, M. L., List of periodical publications relating to municipal affairs, 18.

Condemnation and purchase, 248, 249.

Conference of American Mayors, Proceedings of, 4.

Conference on valuation, Proceedings of, 198, 199.

Conklin, L. H., Rates for electric service, 274.

Connecticut, 51, 345.

Contracts, *see* Franchises.

Control of capitalization, *see* Capitalization, control of.

Conway, Thomas, Jr., The decreasing financial returns upon urban street railway properties, 287.

Cooke, M. L., Experts in valuation cases, 203.

Cooley, M. E., Factors determining a reasonable charge for public utility service, 203, 268; Overhead charges, 225.

Cooper, H. S., Franchises, 127; Special privilege, 127.

Cooper, M. D., History and economics of central station rate making, 256, 274.

Corson, F. H., Industrial power supply from municipal stations, 274.

Cory, C. L., Rate fixing and appraisal, 284, 294; Rates for gas service, 203; Reasonable gas rates and their determination, 284.

Cory, C. L., Vincent, W. G., Jr., and Norton, W. J., Symposium on inventories and appraisals, 203, 216, 221, 225.

Court attitude as to valuation, 249 ff.  
 Court review, *see* Judicial review.  
 Cost of reproduction, *see* Valuation, theories and methods.  
 Costs and Rates, *see* Rate schedules.  
 Cowan, E. W., The price of electricity, 274.  
 Crapper, E. H., Methods of charging for electrical energy, 274.  
 Cravath, J. R., Accounting for depreciation, 236; Demand and diversity factors and their influence on rates, 102, 169, 264, 274; Municipal ownership of electric light plants, 328.  
 Cravens, G. W., Depreciation and maintenance of electrical equipment, 236.  
 Crawford, N. McD., and Woodward, J. H., Engineering matters: British tramways, 117, 370.  
 Crawford, Robert, Glasgow's experience with municipal ownership and operation, 117, 370.  
 Crawfordsville, Indiana, 60, 137.  
 Crocker, Courtenay, Some evils of double taxation, 300.  
 Crosby, O. T., Automatic rate regulation, 294; Physical valuations, 203; Public policies and public utilities, 10, 148.  
 Crosser, Robert, Why I believe in municipal ownership, 320.  
 Crowell, F. B., Quitman municipal water and light plant, 53, 346.  
 Crowell, H. H., Electric lighting rates and depreciation, 32, 256.  
 Crowley, J. C., Control helps utilities, 102, 169.  
 Curtis, C. E., Street railways and their relation to the public, 23, 132, 335; Taxation of street railways for purposes of revenue and control, 32, 111, 301.  
 Curtis, W. J., Local public utilities, 5.  
 Cutler, J. G., Municipal control of public service corporations, 86, 356.  
 Cutting, R. F., Public ownership and social conscience, 320; Shall New York own its subways? 83, 355.  
 Dailey, John, State *vs.* city control, 174.  
 Daly, W. M., Public lighting plant of Detroit, 71, 352.  
 Daniels, C. N., Municipal ownership in Sheffield, 117, 370.  
 Daniels, W. M., Law that has teeth, 78, 163; Municipal ownership, 328; Taxation of railroad and canal property in New Jersey, 301.  
 Dannettell, G. W., Gas ownership in a Kentucky city, 63, 350.  
 Danville, Virginia, 99, 361.  
 Darrach, C. G., Valuation of properties of public utility corporations, 196.  
 Darrow, C. S., The Chicago traction question, 55, 347.  
 Darwin, Leonard, Municipal ownership, 309; Municipal trade, 117, 309, 370.  
 Dary, Georges, Charges for electrical energy supply in France, 112, 266.  
 Davies, D. H., Cost of municipal enterprise, 329; Cost of municipal trading, 329.  
 Davies, F. H., British central station rates, 117, 267.  
 Davies, H. G., Fair interest on investment, 237.  
 Davies, H. J., Some accounting features of the Cleveland railway company's franchise, 89, 141, 179.  
 Davis, F. A. W., Shall there be a charge for fire lines? 290.  
 Davis, G. H., Adjustment of American street car fares, 287.  
 Davis, J. S., Depreciation and rate control, 237.  
 Davis, R. K., Street railway situation in Detroit, 72, 138.  
 Dawes, R. C., Regulation by commission, 148; Regulation of utility corporations, 148.  
 Dawson, W. H., Trading enterprises, 113, 366.  
 Day, Charles, Constructive policy for public service corporations, 10, 274.  
 Deacon, W. G., The Chicago traction plan, 55, 184; A city's lost honor, 51; Detroit's politics halts development, 72; Electric rates for Minneapolis, 75, 262; Public utilities of Newark, 92, 358; Sale of Wheeling gas plant urged, 101, 362; A three-cent car fare test, 92, 263; Toll of politics, 100, 361; Truth about Jacksonville, 52, 346.  
 Dearborn, R. H., Physical valuation of electrical properties in Oregon, 93, 214.  
 Defodor, Etienne, Rates for electricity supply, 113, 266, 274.  
 DeFrese, S. E., Equitable gas rates, 284.  
 DeGonzaga, A., Detroit's street railway problem, 72.  
 Delano, F. A., Application of a depreciation charge in railway accounting, 237.  
 Demand rates, *see* Electric rates.  
 Denver, Colorado, 51, 134.  
 Depreciation, 234 ff.  
 Des Moines, Iowa, 62.  
 Detroit, Michigan, 71, 72, 73, 138, 261, 352, 353.  
 Detroit Public Library, Municipal affairs, 18.

Development expenses, *see* Intangibles.

Dewey, D. R., Legal aspects of corporation franchises, 128, 301; Municipal revenue from street railways, 301.

DeWolf, R. D., Electric central station rates, 275.

Dick, J. R., Influences of tariffs on electricity supply, 275.

Dickerman, J. C., Comparison of electric light and power rates, 32, 256; Cost of producing illuminating gas in American cities, 33, 284; Cost of supplying illuminating gas in the smaller American cities, 33, 284; Determination of unit price in appraisals, 221; Lower electric rates in Philadelphia, 94, 263; Some notes on the regulation of gas service, 184; Standards for gas service, 33, 153, 185; Standards of service clauses in street lighting contracts, 128, 185.

Dickey, C. H., Obligations imposed by the possession of a franchise, 128.

Differential rates, *see* Rate schedules.

Diven, J. M., How can politics be eliminated from municipal waterworks? 312; Special fire protection rates, Elmira, 82, 262.

Diversity factors, *see* Electric rates.

Dix, J. F., Partnership *vs.* principal and agent in public utility rate making, 217.

Dixon, F. H., Recent railroad commission legislation, 33, 153; State railroad control, 61, 161.

Dodge, L. A., Public belt railroad of New Orleans, 63, 351.

Doherty, H. L., Equitable, uniform and competitive rates, 275; Methods of charging, 268; The rate question, 275; Rates, 18, 285; Some features of municipal ownership, 329; State regulation of lighting enterprises, 33, 154.

Donald, Robert, The case for municipal trading, 117, 321, 370; Municipal trading: a defense, 321; Principles of municipal ownership, 321; Recent attacks on municipal ownership in Great Britain, 117, 321, 370; Street railways in British town, 118, 370; Success of municipal ownership in Great Britain, 118, 371.

Donaldsonville, Louisiana, 63, 350.

Doolittle, F. W., The Cleveland experiment, 89, 142, 263; The Milwaukee experiment, 109, 144, 265; Railway operation in Cleveland, 89, 185; Some problems of electric railway industry, 287; Studies in the cost of urban transportation service, 287.

Doty, E. T., Measurement of land values, 233.

Douglass, S. M., Regulation and the public, 10.

Dow, Alex., Art of rate making, 275.

Downey, E. H., Regulation of urban utilities in Iowa, 5, 33, 62, 161, 174.

Dreher, H. W., Effect of utility regulations upon the banks, 102, 169.

Dreyfus, E. D., Appraisement of small electric properties, 221, 237; Reckoning with costs of superseded equipment, 217, 250; Some notes on the large power rate, 275.

Druar, J. F., Rates and rate making, 204, 275.

Dubois, J. T., Municipal electric light and power in Germany, 113, 366.

Dubuque, Iowa, 62, 350.

Duffy, C. N., Cleveland railway situation, 89, 142; Depreciation, 237; Economics of the Cleveland railway situation, 90, 142; Effect of load factor on cost of electric railway service, 287; Electric utilities, 11; Failure of three-cent car fares, 90; Theoretical basis for determining fares, 288.

Duluth, Minnesota, 75, 354.

Duncan, C. S., Paternalism of public service commissions, 148.

Duncan, T. C., Purposes and methods of the Indiana utility act, 60, 161.

Dunkel, J. H., The municipality and the company, 128.

Dunlap, J. H., The water meter rates of Iowa City, 62, 260.

Dunn, S. O., Fair regulation of railroads, 148; Shall railway profits be limited? 294; The state railway commissions, 33, 148, 154.

Dunne, E. F., Municipal ownership in Chicago, 55, 347.

Dupont, A. B., Fallacy of the reproduction cost theory, 217.

Durand, E. D., Street railway fares, 288; Street railway franchises, public regulation and public ownership, 33, 133, 339.

Duration of franchise, *see* Length of term, franchise.

Earl, G. G., Water rates, 64, 260, 290.

Eastman, F. M., Taxation of public service corporations in Pennsylvania, 93, 301.

Eastman, J. B., The public utilities commissions of Massachusetts, 66, 162. *See also* Woods, R. A.

Eastwood, J. S., The railroad commission and the public, 47, 158, 174.

Eberhart, A. O., Why I believe in state regulation, 174.

Eberle, George, Copper zone *vs.* nickel zone as a basis of interurban rates, 288.

Edgar, C. L., and Clark, Walton, Analyses of the information concerning municipal ownership collected by the National Civic Federation, 312.

Edmondson, W. H., A mechanical computer for electric energy rates, 275.

Edmonton, Canada, 111, 365.

Edwards, H. M., Accounting for depreciation, 237; Electric light accounts and their significance, 180; Regulated electric light accounting, 79, 164, 180.

Egbert, H. McC., Failure of municipal gas plant, 92, 358.

Einstein, A. C., Central station rate schedules for retail customers, 275.

Eisenmenger, H. E., Computation of the cost of current, 275; Graphical analysis of the St. Louis residence rates, 77, 262, 276; Some geometrical aspects of the three-charge-rate system, 276; Space representation of central station rates, 276; Theoretical basis of the multiple rate system, 276.

Electrical World, On what basis shall public utilities be valued? 204.

Electric rates, 271 ff.

Elkins, A. F., Public service accounting, 180.

Ellicott, E. B., Chicago's experience with municipal lighting, 56, 347; Chicago's lighting plant, 56, 347; Municipal electric lighting in Chicago, 56, 347; Robert A. Waller municipal lighting plant, 56, 347; Thirteen years' experience with municipal street lighting at Chicago, 56, 347.

Elliott, E. L., Indefinite candle power in municipal contracts, 128, 185.

Ellis, R. L., Rates for electricity, 276.

Elmira, New York, 82, 262.

Ely, R. T., Municipal ownership of natural monopolies, 312, 321.

Emery, J. A., Statistical units used in analysis of electric railway accounts, 180.

Engineering Index, 18.

Engineering Index Annual, 18.

England, *see* Great Britain.

Erickson, Halford, Advantages of state regulation, 11, 144, 174, 185, 378; As to depreciation accounting, 237; Depreciation, 237; Depreciation accounting, 237; Depreciation and its relation to the fair value, 238; Depreciation problems, 238; Electric lighting and power rates, 276; Importance of uniform accounts and statistics, 180; Indeterminate franchise or permit, 102, 143, 145; Making rates for electric current, 276; Making rates for electric plants, 204, 276; Methods of determining life, 103, 169, 238, 250; Methods of providing for and recording depreciation, 103, 170, 238, 250; Original cost, 217; Principles of valuation, 204, 225; Rates and rate making under the Wisconsin law, 103, 170; Regulation and reasonable returns, 294; Regulation of public utilities, 190, 276; Regulation of public utilities in Wisconsin, 11, 103, 170; Regulation of utilities by commission, 11, 103, 170; Regulation or profit-sharing? 148, 301; Should government regulate security issues? 190; Some facts relating to depreciation and rate making, 238, 268; Some problems of public utility accounting, 238; What should a company earn? 294; Wisconsin method of depreciation accounting, 103, 170, 238.

Erickson, John, Waterworks plants and the proper rates for domestic and public service, 291.

Esch, Fred., Utility law variations, 47, 103, 159, 170.

Eshleman, J. M., Criticism of the reproduction theory, 217; Regulation fundamentals, 11; Should the commission have power to control the issuance of securities? 190; State *vs.* municipal regulations of public utilities, 47, 159, 175; What regulation must accomplish if it is to be permanent, 11, 148, 175.

Esson, W. B., Principles and profits in electrical supply, 276.

Eugene, Oregon, 93, 263, 358.

Evans, N. W., History of taxation in Ohio, 301.

Ewing, M. C., Recall of commissioners illogical, 149.

Expert testimony, *see* Valuation, theories and methods.

Fairchild, A. W., Review of recent legislation in Wisconsin, 103, 170.

Fairlie, J. A., Chicago street railways, 56, 135, 347; Essays in municipal administration, 23, 24, 335; Municipal activities in Great Britain, 24, 118, 371; Municipal conditions in some European cities, 113, 366; Municipal electric lighting in Detroit, 72, 353; Municipal government in Italy, 125, 377, in Vienna, 109, 363; Municipal

improvements, 24, 335; Public utility legislation in Illinois, 53, 160; Recent extensions of municipal functions, 34, 133, 340; Recent legislation on municipal functions, 34, 133, 340; Some considerations on municipal ownership, 313; Street railway question in Chicago, 56, 135, 348.

Fair value, *see* Valuation, theories and methods.

Fares, street car, 286 ff.

Fay, C. N., City gets fifty-five per cent, 56, 135, 301.

Fay, E. P., Assessment and collection of school taxes on public service corporations, 79, 301.

Fenkell, G. H., Description of Detroit waterworks, 72.

Ferguson, Maxwell, State regulation of railroads in the south, 34, 154.

Fernald, R. H., Service regulations for gas, 185.

Fernie, F., Depreciation of underground cables, 238; Diversity factors, 277; Obsolescence of electric lighting plant, 238.

Ferrin, A. W., Blue sky legislation, 63, 190.

Feurtado, R. S., Fair price of gas at St. Paul, 76, 262.

Feustel, R. M., Some aspects of the work of the Illinois utilities commission, 53, 160.

Finance forum, *see* Y. M. C. A., N. Y. West Side Branch.

Fink, Henry, Valuation of railroad property, 204.

Fire hydrant rates, *see* Water rates.

Fisher, W. L., The American municipality, 313.

Fitting, R. N., Depreciation, 238.

Flat rates, *see* Rate schedules.

Fleming, H. B., *see* Arnold, B. J.

Fletcher, F. N., Should public utilities be assessed for taxation by commissions? 302.

Florida, 52, 345, 346.

Floy, Henry, Appraisals of public utility properties in greater New York, 83, 213; Cost of reproduction, 221, 226; Depreciation, 239, 250; Depreciation as related to electrical properties, 239; Development expenses, intangible expenses, non-physical costs, overhead expenses, 221, 226, 250; Engineer's activity in public affairs, 149, 231; Examples of important appraisals, 34, 211; Franchises, good will, going value, contracts, 226, 231; Franchises, working capital and bond discounts, 226, 231; Indefinite obligations in municipal contracts, 128; Land, paving and water rights, 233; Public service commissions, 34, 154; Structural costs, 233; Valuation of public utility properties, 196, 221; Value for rate making, 196, 217, 226.

Fowlwell, A. P., Standard forms for municipal utilities, 180.

Foote, A. R., Cost of service to users and tax payers, 269, 309; Economic aspects of municipal franchises, 128; How should the franchise question be settled? 128; Municipal ownership problem solved, 11, 320; Municipal public service industries, 6, 309; No government should operate an industry, 83, 329, 355; Non-taxation of service companies, 149; Regulation and taxation of public service corporations, 302, 378; Regulation of public utilities, 79, 104, 164, 170; Relation of franchise taxation to rates, 302; Taxation of public service corporations, 302; Taxation of railroads in the United States, 302.

Foote, Mark, Grand Rapids' municipal water plant, 73, 353; Grand Rapids to quit city lighting, 73, 353; Is a five-cent street car fare equitable? 73, 261.

Ford, F. R., Holding company, advantage and disadvantages, 34, 308; Passenger rates and fares in cities, 34, 256, 288; Theory of street railway rate regulation as developed in the Coney Island fare case, 79, 213, 250; Treatment of depreciation, 239; Valuation of intangible street railway property, 35, 211, 221, 226.

Ford, H. J., Baltimore, 64.

Ford, John, Reasons for municipal ownership, 321.

Forest, H. V., Profits in the lighting business, 294.

Forrest, J. D., New plan for the control of quasi-public works, 11, 60.

Forse, W. H., Jr., Electric railway auditing and accounting, 180; Improving accounting methods, 180; Interline accounting of interurban railways, 180; Sinking funds, 239.

Forstall, A. E., Brief history of gas legislation in Great Britain, 118, 298; Concerning gas standards, 185; Review of recent decisions of commissions, 250; Sliding scale regulation of prices and rates of dividend, 298. *See also* Burdett, Frederick.

Fort Wayne, Indiana, 60, 349.

Foster, H. A., Capitalization, 294; Central station bookkeeping, 181; Control of public utilities, 149; Court decisions, 251; Depreciation, 239; Engineering valuation of public utilities and factories, 18, 197, 221; Franchise, 128, 145, 231, 251, 302; Handling of depreciation funds, 240; Purposes of valuation, 204; Value, 217; Value of good will, going concern or going value, 226.

Foster, Roger, Taxation of elevated railroads in New York, 83, 302.

Foulke, W. D., Public service should be free, 321.

Fowle, F. F., Discrimination in central station rates, 277; Going value, 226; Practical discussion of depreciation, 240.

Fowler, C. P., Some fundamental principles underlying the sale of electrical energy, 277.

Fox, A. M., Going value in purchase vs. rate cases, 227, 248.

France, 112, 113, 144, 266, 365.

Franchises, 127 ff.

- General works, 127.
- History: United States and Foreign, 132; United States—general, 132; California, 134; Colorado, 134; Illinois, 135; Indiana, 137; Iowa, 137; Massachusetts, 137; Michigan, 138; Minnesota, 138; Missouri, 139; New York, 139; Ohio, 141; Pennsylvania, 143; Wisconsin, 143; Canada, 144; France, 144.
- Length of term, 144.

Franchise value, 231, 232.

Francis, G. B., Electric railways in the Ohio valley, 87; Street railway system of Providence, 97.

Francis, V. H., Why municipal plants are failures, 329.

Francisco, M. J., Business of municipalities and private corporations compared, 35, 256, 340; Municipalities vs. private corporations, 35, 256, 340; Municipal ownership: its fallacy, 35, 329, 340; Municipal ownership vs. private corporations, 24, 255, 313, 335.

Frankfort-on-the-Main, Germany, 114, 367.

Freeman, W. W., Municipal ownership uneconomic, 329.

Fremont, Nebraska, 77, 354.

French, H. F., Reproduction value vs. fair value, 217.

French, H. J., Laying foundation for new commission, 53, 160.

Friedman, H. G., Taxation of corporations in Massachusetts, 66, 302.

Friedman, H. J., A word about commissions, 149, 192.

Frost, H. H., Description of Akron water-works plant, 88.

Fuller, C. H., Estimating cost of track construction, 181.

Fuller, G. W., Elements to be considered in fixing water rates, 291.

Fullerton, Irwin, Do low fares increase riding? 72, 261, 288.

Galena, Illinois, 59, 348.

Galesburg, Illinois, 59, 348.

Galloway, J. D., Is utility regulation on the right basis? 12.

Gandolpho, J. H., Valuation of public utility property, 12, 204, 217.

Gardiner, H. M., Discord in municipal ownership, 61, 349; Electric plant of Logansport, 61, 349.

Gardiner, W. H., Public relations and taxation, 302.

Gardiner, W. H., Jr., London sliding scale as a method for regulation, 118, 298; The making of rates, 285.

Garges, D. E., Washington, D. C., 52.

Garrison, N. J., Intangible assets of public utilities, 227.

Garrison, W. L., Establish principle and let methods evolve, 303, 313.

Garvin, L. F. C., Public service should be free, 321.

Gasell, G. A., Sliding scale gas rates, 298.

Gaskill, D. L., Causes of failures in municipal lighting, 329; Ohio's public utility law's weakness, 87, 167; Relation of electric light companies to municipalities from a legal standpoint, 128.

Gas rates, 284 ff.

Gates, A. J., Catalogue of technical periodicals, 18.

Gault, E. D., Accounting system for small electric railway, 181.

Gaynor, W. J., New York's subway policy, 83.

Gear, H. B., Diversity factor in the distribution of electric light and power, 277.

Geijsbeek, J. B., Fair return to public utilities, 240.

General works, 3 ff.

- Books, 3; articles, 9; bibliographies, 17.

Gentry, R. G., Denver's famous street lighting, 51.

George, H. H., Estimating the cost, 181.

Georgia, 52, 53, 259, 346.

Germany, 113, 114, 266, 366, 367.

Gessell, G. A., Minnesota public utility rates: gas, electric, water, 74, 262, 354.

Gille, H. J., Public service corporation rates, 277.

Gillette, H. P., Appraisal of electric properties, 204; Appraisal of overhead costs, 227; Appraisal of water power rights, 227; Court decisions showing present value to be the only value for rate making purposes, 251; Development cost or going value, 227; Non-physical or going concern values, 227; Rational method of calculating depreciated value, 240; Two conflicting theories of valuation, 218; Use of depreciation data, 240; Uses of an appraisal, 204; Valuation of public service properties, 227, 294; Valuation of waterworks properties, 204: I. Inventorying a waterworks plant, 222, II. Estimating accrued depreciation, 240, III. Appraisal of overhead costs, 227, IV. Of reservoir site value, 233, V. Of water right values, 227, VI. Of development cost, 228, VII. Of working capital, 228, X. Rate of fair return, 294.

Gilmore, E. A., Wisconsin public utilities act, 104, 170.

Gladden, Washington, Public service companies and city governments, 321.

Glaeser, M. G., Problem of unit prices in valuation, 222.

Glasgow (corporation), Handbook on the municipal enterprises, 118, 371.

Glasgow, Scotland, 115, 117, 118, 119, 121, 123, 124, 125, 368, 370, 371, 373, 375, 376, 377.

Glendale, California, 48, 343.

Goetz, J. H., Court decisions on depreciation, 251.

Going concern value, *see* Intangibles.

Going value, *see* Intangibles.

Goldman, O. B., Multiplex cost and rate system, 277.

Goldsworth, A. D., Municipal electric lighting in Alameda, 48, 343.

Gonden, H. J., Gas at less than cost, 74; Regulation *vs.* municipal ownership, 330; Robbing Peter, 35, 330, 340.

Goodnow, F. J., The British municipality, 313; Powers of municipalities respecting public works, 24.

Goodrich, J. P., The public welfare and the holding company, 61, 190, 308.

Good will, *see* Intangibles.

Gordon, F. G. R., Chippewa Falls defeats municipal ownership, 108, 363; Jacksonville municipal electric lighting plant, 52, 346; Municipal ownership failures in Indiana, 60, 349; Municipal ownership in Birmingham, 47, 343; Seamy side of a famous municipal enterprise, 111, 364; Street railways of Boston *vs.* tramways of Glasgow, 24, 371; The truth about Calgary, 111, 364.

Gordon, J. B., Equitable sliding scale for rates of electric power, 277.

Graham, D. A., Application of theories of regulation to management, 12; appraisal of waterworks properties, 205, 218.

Grambs, W. J., The inefficiency of municipal ownership, 100, 361; Notes on rate making, 277.

Grand Rapids, Michigan, 73, 74, 261, 353.

Grant, G. R., New York public service commission for the second district, 79, 164.

Grant, H. D., Depreciation and reserve accounts, 240.

Gray, H. L., Necessity of depreciation reserves, 240.

Gray, J. H., Competition and capitalization as controlled by the Massachusetts gas commission, 66, 162, 190; Control of quasi-public enterprises, 68; Difficulties of control, 67; Expert testimony in rate valuation cases, 218; Gas commission of Massachusetts, 67, 162; General history and legislation: United States gas works, 35, 340, United States waterworks, 35, 340; Public service commissions, 12, 35, 154; Regulation of public service corporations, 218. *See also* Hard, William.

Great Barrington, Massachusetts, 70.

Great Britain, 114 ff., 266, 267, 367 ff.

Gross, Murray, San Francisco, 50.

Grosser, H. S., Chicago, 56; Movement for municipal ownership in Chicago, 56, 348.

Grout, E. M., New York City should own the gas supply, 84, 322, 355.

Gruhl, Edwin, Cost of carrying a passenger, 288; Depreciation estimates, 240; Policies of regulating bodies, 35, 154; Recent tendencies in valuations, 36, 205, 211, 218, 251; Taxing the utilities, 303; Uniform accounting, 181.

Grunsky, C. E., Appraisal of public service properties, 205, 241; Depreciation as an element in appraisal, 241.

Guernsey, N. T., Principles of railway valuation, 205; Regulation of municipal utilities, 149; Relation of taxation to rates, 303; Utility regulation, 149; Valuation: a common sense view, 205.

Guyot, Yves, Where and why public ownership has failed, 118, 330, 371.

Gwinn, D. R., Water rates charged in 375 cities, 36, 257, 341.

Hagenah, W. J., Development of the true function of the commission, 36, 154; Intangible values of electric railways, 228; State control *vs.* municipal, 175.

Hale, R. S., Municipal ownership in England, 118, 371; Price of electricity, 277.

Hall, B. E., Administrative difficulties of the special franchise tax law, 79, 303.

Halle, Germany, 114, 367.

Hamilton, J. H., Syracuse water supply, 87, 356.

Hamilton, Ohio, 92, 258.

Hamilton, Stacy, Résumé and comparison of rate theories, 269.

Hamlen, E. W., Glasgow and its municipal tramways, 69, 119, 330, 371.

Hamm, W. C., City-owned street cars, 119, 371, 372.

Hammond, Robert, Depreciation, 241.

Haney, L. H., Depreciation and valuation, 241; Joint costs, 260; Railway regulation in Texas, 98, 168.

Hanna, J. R., Des Moines' street railway franchise, 62, 137.

Hansel, Charles, Valuation of railroads in New Jersey, 78, 213, 303.

Hanson, A. C., Tariffs for electric motive power, 277, 288.

Hard, William, and Gray, J. H., General history and legislation: United States electricity works, 34, 36.

Hardenberg, W. E., Calgary's municipal street railways, 111, 365.

Harris, L. H., Service regulations for electrical utilities, 185.

Harris, R. W., Method for determining the adequacy of an electric railway system, 185.

Harrison, C. H., Regulation of public utilities, 12, 175, 322.

Harrison, John, Municipal trading, 313.

Harshman, C. C., Obsolescence in appraisal for rate making, 241.

Hart, A. B., *see* McLoughlin, A. C.

Hartwell, E. M., Boston, 69.

Harvard Law Review — Notes, Problem of going value, 228, 251; Valuation of property of public service company, 251; Valuation of public service franchises, 231, 251.

Harzfeld, J. A., Utilities commission of Kansas City, 76, 163.

Haselmann, Depreciation as applicable to electric railways, 241.

Haskins, C. W., and Johnson, J. F., Recent history of municipal ownership, 36, 341.

Hasse, A. R., Index of economic material in documents of the states, 18.

Hatch, A. S., Cost of electric lighting, 36, 257.

Hatch, J. N., Development of the electric railway, 24.

Hatch, W. B., Successful fight for a municipal gas plant, 74, 354.

Hatfield, H. R., Some neglected phases of accounting, 181.

Hatton, T. C., Municipal ownership of water supplies, 322.

Hatton, W. H., Public service commissions, 12, 175.

Hawley, W. C., *see* Metcalf, Leonard.

Hay, David, *see* Mott, Basil.

Hayden, J. C., Street railway situation in Detroit, 72.

Hayden, W. S., Street railway situation in Cleveland, 90, 142.

Hayes, H. V., Ascertainment of fair present value, 206; Depreciation, 241; Determination of replacement cost, 233; Fair present value, 248; Fair rate of return, 295; Going value, 228; Original cost versus replacement cost, 206; Principles to be applied in valuing land, 233; Property valuations, 206; Public's financial interest in public utilities, 149; Public utilities: their cost new and depreciation, 197, 218, 222, 228, 241, fair present value and return, 197, 218; Values of good will and franchises, 232; Worth of service, 295.

Head, J. M., One mayor's experience, 97, 360.

Heilman, R. E., Chicago subway problem, 57, 135; Chicago traction, 57, 135, 348; Commission control of refunding utility securities, 36, 154, 190; Development by commissions of the principles of capitalization, 36, 154, 190, of valuation, 37, 155, 211, 251; Some economic aspects of waterworks valuation, 37, 228, 252.

Heim, J. B., Meter rates, 37, 108, 257, 265; Municipal ownership of waterworks, 108, 363.

Helm, A. E., Principles to be applied in valuation of lands, 233, 252.

Henderson, C. R., Competitive waterworks, 37, 341.

Henderson, Kentucky, 63, 350.

Henriques, J. C., Power plant inventory, 222.

Herrick, C. L., Labor costs and load factor, 277.

Heyn, E. T., The municipal ownership of street railways in Germany, 113, 366; Recent history of municipal ownership in Germany, 114, 366.

Hicks, T. L., Philadelphia gas works under private operation, 94, 358.

Higgins, E. E., Municipal and private management of street railways, 129, 330.

Hild, F. W., Effect of rate of fare on riding habit, 289.

Hill, J. W., Municipal ownership of public utilities, 330.

Hill, N. S., Jr., Valuation of public utilities, 266.

Hill, W. P., Municipal ownership would stop corruption, 322.

Hill, W. R., City ownership of water supply, 87, 356.

Hills, A. S., Origin, growth and work of commissions, 37, 155.

Historical cost, *see* Valuation, theories and methods.

History of utilities and of regulation, 22ff. United States and foreign, 22; United States — general, 28; Alabama, 47; California, 47; Colorado, 51; Connecticut, 51; District of Columbia, 52; Florida, 52; Georgia, 52; Idaho, 53; Illinois, 53; Indiana, 60; Iowa, 61; Kansas, 63; Kentucky, 63; Louisiana, 63; Maryland, 64; Massachusetts, 65; Michigan, 71; Minnesota, 74; Missouri, 76; Nebraska, 77; New Jersey, 78; New York, 78; Ohio, 87; Oklahoma, 93; Oregon, 93; Pennsylvania, 93; Rhode Island, 97; South Dakota, 97; Tennessee, 97; Texas, 97; Vermont, 98; Virginia, 99; Washington, 99; West Virginia, 101; Wisconsin, 101; Austria, 109; Belgium, 109; Canada, 109; France, 112; Germany, 113; Great Britain, 114; Italy, 125; Japan, 126; Spain, 126; Sweden, 126; Switzerland, 126.

Hixson, L. T., More about sinking funds, 241.

Hoadley, E. E., Tariff alterations, 278.

Hoag, S. A., System of rates for electric light and power, 278.

Hocken, H. C., Hydroelectric system in Toronto, 111, 365.

Hodge, W. H., Columbus: a city in the dark, 92, 357; Commonwealth Edison Company, 57; Concerning franchise values, 232; Long term franchise grants, 145; Ownership that does not pay, 59, 348; Public service of Omaha, 77; Three-cent traction service, 90.

Hodgkins, H. C., Franchises of public utilities, 37, 133, 155.

Holcomb, A. E., Assessment of public service corporations, 303; Public service corporation assessment, 303.

Holcombe, A. N., Electric lighting system of Paris, 112, 365.

Holding companies, 308. *See also* Capitalization, control of.

Holland, Michigan, 74.

Holloway, W. R., Municipal ownership in Canada, 111, 365.

Holmes, F. L., Commissions and the courts, 195; Depreciation, 242; Indeterminate permit and convenience and necessity laws, 143, 145; Physical valuation of railroads and utilities, 206, 214; Rate of return, 295; Regulation of railroads and public utilities in Wisconsin, 6, 104, 149, 171, 264, 266; Regulation of stocks and bonds, 191; Regulation that regulates, 104, 171; Standardization of service, 185; State control of municipally owned plants, 378; State *vs.* local control, 175; Uniform accounting, 181.

Holyoke, Massachusetts, 70, 261, 352.

Homer, F. T., Public advantages of holding companies, 308; The public, the investor and the holding company, 308.

Hotchkiss, W. E., Chicago traction, 57, 136; Recent phases of Chicago's transportation problem, 57, 136.

Houston, Texas, 98, 264.

How, Jared, Depreciation as an element in rate making, 242.

Howe, F. C., The British city: the beginning of democracy, 119, 372; Case for municipal ownership, 322; City and the public service corporation, 37 Does municipal ownership pay? 119, 372; European cities at work, 119, 372; Municipal ownership in America, 37, 341, in Cleveland, 90, 357, in Europe, 24, 336, in Great Britain, 119, 372; Municipal ownership: the testimony of foreign experience, 24, 336; Socializing the means of transit, 114, 366; Taxation of quasi-public corporations in Ohio, 87, 303; Taxation of railroads and other public service corporations, 304; The way out: municipal ownership, 322.

Howland, H. J., A year of government by commission, 79, 164.

Howlett, C. A. S., *see* Lloyd, E. W.

Hoxie, G. L., Some features of rate fixing for electric properties, 206, 269.

Hudnall, G. H., Public service commission law of Wisconsin, 104, 171.

Hudson, Leo, Example of competition between publicly and privately owned waterworks, 96.

Huebner, G. G., Five years of railroad regulation, 38, 155.

Huggins, W. L., State regulation of public utilities, 25, 155.

Hull, England, 119, 371.

Humphreys, A. C., Depreciation, 242; Depreciation: estimated and actual, 242; Engineer's part in regulation, 149; Need for uniform accounts, 181; Present and growing need for uniform system of records and accounts, 181; Public service rate making, 285; Public utilities, 313; Qualifications of a commissioner, 149; In rate fixing by commission should depreciation be deducted, 242; Reform and regulation, 150.

Humphreys, C. J. R., Development of the public utilities commission, 38, 155.

Hungerford, Edward, Rapid transit in Boston and vicinity, 69.

Hunter, C. F., Commission's electrical testing outfit, 80, 164, 186.

Hunter, W. R., Municipal ownership of utilities, 330.

Hurd, E. C., Organization for and results of physical valuation in Nebraska, 77, 213; Should depreciation apply? 242.

Hutchinson, R. W., Jr., Question of municipal ownership, 330.

Iowa, 53, 259, 346.

Illinois, 53 ff., 135, 136, 137, 160, 161, 212, 259, 346, 347, 348.

Illinois Bureau of Labor Statistics, Report, 53, 346.

Indeterminate permit, *see* Length of term, franchise.

Indiana, 60, 61, 137, 161, 349.

Indianapolis, Indiana, 60, 61, 137, 349.

Industrial Arts Index, 18.

Ingham, W. B., Theory and practice of the skip-stop, 186.

Ingram, F. F., Municipal lighting, Detroit, 72, 353; Municipal operation in Detroit, 72, 353; Municipal ownership and operation *vs.* private ownership, 322; Should the people or the corporations light our cities, 72, 322, 353. *See also* Bemis, E. W.

Insull, Samuel, Some comments on public utility commissions, 150.

Intangibles, 224 ff.

Interstate Commerce Commission, *see* U. S. Interstate Commerce Commission.

Inventories, 220 ff.

Iowa, 61, 62, 137, 161, 212, 260, 349, 350.

Iowa City, Iowa, 62, 260.

Ireland, *see* Great Britain.

Italy, 125, 126, 267, 377.

Ivens, E. M., Donaldsonville electric light and waterworks plant, 63, 350.

Ives, A. S., Factors in rate making, 278.

Ivins, W. M., and Mason, H. G., Control of public utilities, 80, 164.

Jackson, D. C., Appraisals of electric light and power properties, 206; Equitable rate making by public service companies, 12; Equitable rates for public service, 12.

Jackson, H. D., Discrimination in rates for electricity, 278; Public *vs.* the public service corporation, 150, 175; Rates for electricity, 278; Theories of electric current rate schedules, 278.

Jackson, W. B., Depreciation and reserve fund of electrical properties, 243; Depreciation of electrical properties, 243; Depreciation problem, 243; Discussion of the depreciation problem, 243.

Jacksonville, Florida, 52, 345, 346.

James, C. C., Depreciation and value of public utilities, 243.

James, E. J., Municipal gas and electricity in Halle, 114, 367; Relation of municipality to the gas supply, 25, 322.

James, E. W., Ethical principle in physical valuation, 206.

James, R. C., and Turner, E. H., General remarks upon financial conditions, 119, 372. *See also* Turner, E. H.

Japan, 126, 377.

Jeckell, J. A., Supply of cheap electrical energy for industrial purposes, 119.

Jenkins, J. B., Absurdities of the straight line method of determining depreciation, 243.

Jenkins, W. C., Des Moines' utilities, 62; Public utilities of Cincinnati, 88, of St. Louis, 77; Public utility holding companies, 308; Unusual traction conditions in Pittsburgh, 96.

Jenson, M. E., Experiment conducted at Norwich, 51, 345.

Joerns, W. G., Duluth, 75.

Johannesburg, Transvaal, 122, 374.

Johnson, E. R., American railway transportation, 38; Courts and railway regulation, 195; Elements of transportation, 38; Principles of governmental regulation, 150; Public regulation of street railway transportation, 13, 25; Railway regulation by the states, 38, 155; Railway taxation, 304; Regulation

of railways by the American state governments, 38, 156; Trend of governmental regulation of railroads, 39.

Johnson, E. R., and Van Metre, T. W., Courts and railroad regulation, 195; Regulation of railways by the American state governments, 38, 155.

Johnson, George, Depreciation, 243; Electric lighting accounts, 181.

Johnson, J. F., *see* Haskins, C. W.

Johnson, R. V., Workings of Wisconsin commission, 104, 171.

Johnson, T. L., Municipal ownership for all public utilities, 323.

Jonah, F. G., Valuation of railroads, 206.

Jones, A. C., Light and water plant of Opelousas, 64, 351; Opelousas's municipal lighting plant, 64, 351.

Jones, C. L., American municipal services from the standpoint of the entrepreneur, 330; Madrid, its government and municipal services, 126.

Jones, S. P., Advisability of a state commission for Minnesota, 74, 163, 175; Lower gas and electric rates in Minneapolis, 75, 262; Municipal gas settlement, 75, 138; State *vs.* local regulation, 176; What certain cities have accomplished without state regulation, 39, 176.

Jones, W. H., Public services of Indianapolis, 61.

Jordan, F. C., Rate making, 291; Making rates for water service, 291.

Judicial Review, 192 ff.

General works, 192; History, 194.

Juergensen, D. F., Misapplication of interest, contingencies, and engineering items, 219, 252; Railroad valuation: reproduction cost new as a sole basis for rates, 219, 252; Wrong basis for rates, 207, 219.

Kahn, J. B., Alameda municipal electric light plant, 48, 343.

Kalamazoo, Michigan, 74, 353.

Kamloop, Canada, 109, 363.

Kansas, 63, 350.

Kansas City, Kansas, 63, 350.

Kansas City, Missouri, 76, 139, 163, 213, 354.

Katagiri, Yoshio, Municipal electric road of Osaka, 126, 377.

Kealy, P. J., Discussion of depreciation, 243; Municipal coöperation in public utility management, 13, 129; Overhead charges in valuation work, 228, 229; Provisions of the Kansas City franchise, 76, 139; Part played by overhead charges, 229.

Keith, John, Kansas City's waterworks fiasco, 76, 354.

Kelly, Edward, Operating a central station against municipal competition, 98, 360.

Kelsay, G. H., Cost and sale of power by railways, 269.

Kennard, E. G., Comparative costs of gas and electric lighting, 278, 285.

Kennedy, J. S., New York public service commissions, 80, 164.

Kennedy, S. M., Justification of deviations in electric rates, 278.

Kent, C. A., Suggestions for and against municipal ownership, 331.

Kentucky, 63, 350.

Kerr, W. D., Constitutional protection in valuation, 193, 252; Future regulation of public utilities, 13; Public *vs.* private ownership, 207, 313; Qualifications needed for public utilities commissioners, 39, 150, 156.

Kidston, W. L., Seattle municipal lighting plant, 100, 361.

Kiefer, P. J., Central station rate making, 278.

Kiersted, Wynkoop, Influence of state regulation upon economy and efficiency, 13; Valuation of waterworks property, 207.

Kimball, F. C., Equity of a minimum charge for metered service, 291.

King, C. L., Franchise essentials, 129; History of the government of Denver, 51, 134; Minnesota home rule and Wisconsin regulation, 105, 171; Municipal ownership *vs.* adequate regulation, 314, 323, 378; Need for public utility commissions, 13, 150; Need for regulation, 13, 39; Public regulation of gas lighting, 13; Regulation of municipal utilities, 6; Rules regulating water service adopted by commissions, 39, 156, 186; State *vs.* municipal utility commissions, 176.

Kittridge, A. O., Ideal system of street railway accounts, 182.

Klotz, R. G., Pick rational plant units for depreciation accounting, 243.

Klumpp, J. B., Summary of commission regulations governing gas supply, 39, 156; Summary of commission regulations in New York, 186. *See also* Newbigging, William.

Klumpp, J. B., and Winchester, A. E., Engineering matters: British electricity supply works, 120, 372.

Knightstown, Indiana, 61, 349.

Knoop, Douglas, Principles and methods of municipal trading, 120, 309, 372.

Knowles, Morris, Determination of going value, 229; Equitable water rates the result of metering, 291; Relation of reproduction cost to fair value, 219; State regulation of public utilities, 13, 150.

Knowles, Morris, and Scharff, M. A., Relation of "out-of-pocket cost" to water rate making, 291.

Knowlton, H. S., Labor costs in central stations, 279; Street railway fares in large cities, 289.

Koiner, C. W., Municipal ownership of electric utilities on the Pacific Coast, 39, 257, 341; Pasadena's municipal light and power plant, 49, 258, 344.

Kuhn, G. W., How to appraise public utility property, 222.

Kuichling, E., *see* Metcalf, Leonard.

Lackie, W. W., Tariffs for electrical energy, 279.

Lake Forest, Illinois, 59, 137.

Lakey, F. E., Providence, 97.

Lamb, L. A., Status of the Chicago traction problem, 57.

Land value, 233, 234.

Lang, A. E., Toledo street railway situation, 92.

Lapp, J. A., Public utilities-control, 80, 105, 164, 171.

Larson, C. M., State regulation of municipally owned plants, 105, 362, 378.

Lawler, J. C., Schedule of rates involving investment cost of reaching the consumer, 270, 279.

Lawton, W. H., Depreciation accounts, 243; Depreciation, intangible values and rates, 150, 229, 243; New classification of electric railway expense, 182; Sinking funds in rate valuations, 244.

Lazell, F. J., Municipalizing a water plant, 62, 349.

Lea, H. I., Elements of gas rate making, 285; Gas rate making, 285.

Leake, P. D., Depreciation, 244.

Leake, Paul, Street railway situation in Detroit, 73, 138.

Leber, O. H., Ownership of municipal monopolies, 323.

Ledoux, J. W., Water rates and extensions, 291.

Lee, C. W., Free signs and flat rates, 279.

Lee, E. B., Public utility movement: holding companies, 308; commissions, 39, 150.

Lee, G. A., Regulation of public service utilities, 150.

Leeds, England, 124, 376.

Legal aspects of regulation, *see* Judicial review.

Length of term, franchise, 144 ff.

Leonard, C. F., Gas service regulation in New York, 80, 165, 186.

Leroy-Beaulieu, Paul, Public ownership in France, 112, 365.

Lethbridge, Canada, 110, 364.

Lewis, C. T., Duration of franchises, 145; How should public service corporations be controlled? 13.

Lewis, E. O., Philadelphia's relation to rapid transit company, 94, 143.

Lewis, H. T., Interest and profits in rate regulation, 105, 171, 219, 295.

Library of Congress, *see* U. S. Library of Congress.

Liebernecht, A., Development of Zurich tramways, 126, 377.

Liège, Belgium, 109, 363.

Lighting rates, *see* Electric rates.

Lincoln, P. M., Rates and rate making, 279.

Lindsley, Van Sinderen, Rate regulation of gas and electric lighting, 7, 193.

Liverpool, England, 115, 368, 375.

Lloyd, E. W., Howlett, C. A. S., and Waring, J. M. S., Relation of load factor to power costs, 279.

Local regulation, *see* State vs. local regulation.

Lockwood, H. A., Are our municipalities to become business corporations? 331.

Lockwood, J. E., Analysis of municipal lighting in Detroit, 73, 353.

Loftus, D. J., Logansport electric light department, 61, 349.

Logansport, Indiana, 61, 349.

London, England, 114, 118, 120, 121, 122, 124, 125, 267, 367, 374, 377.

London sliding scale, *see* Sliding scale.

Loomis, H. B., Franchise taxation in Illinois, 53, 304.

Los Angeles, California, 48, 159.

Louisiana, 63, 64, 260, 350, 351.

Loveland, H. D., How commissions regard utilities, 150.

Lowell, A. L., Municipal trading, 120, 314, 372.

Lowrie, S. G., Public utility problems in Cincinnati, 88.

Lubbock, John, *see* Avebury, J. L.

Lyons, B. F., Municipal ownership, 101, 120, 314, 362, 373, of gas works, 101, 120, 314, 362, 373.

MacAfee, J. B., Result of further legislative regulation of electric railways, 39; View of the no-seat no-fare proposition, 186.

Macassey, Lynden, Transportation facilities and street railway traffic in London, 120.

McBride, R. S., *see* Rosa, E. B.

McClellan, William, Diverted efforts of commissions, 80, 165.

McColl, Donald, Tramway bookkeeping and accounts, 182.

McCulloch, Richard, Local *vs.* state regulation, 176; Present tendency of regulation, 40, 150, 156.

McFall, R. J., Railway monopoly and rate regulation, 207, 295.

McGrath, D. J., Actual returns in the past, 67, 295; Long rides for a nickel, 40, 257; Return on Massachusetts investment, 67, 295.

Mack, E. S., Depreciation, 244; Standards for rate regulation by commission, 219, 252.

McKay, E. F., The Oklahoma commission, 93, 167.

McKerrow, H. G., Some results in municipal ownership in Great Britain, 120, 373.

McLain, C. A., Some distinctions between the legal and administrative phases of franchise valuation, 232.

McLain, F. D., Street railways of Philadelphia, 95, 143.

MacLean, A., Municipal ownership in Edmonton, 11, 365.

McLean, Charles, Dubuque's public ownership predicament, 62, 350.

McLean, George, Theory of public utility franchises, 129.

McLean, S. J., Railway rate regulation in Canada, 111; State regulation of railways, 40, 156.

McLaughlin, A. C., and Hart, A. B., *Cyclopedia of American government*, 7.

McLaughlin, J. J., New Orleans, 64.

McMath, T. B., Description of the street railway system, 61.

MacPherson, H. H., Rates and the use of rates, 279, 285.

MacRae, T. B., More about sinking funds, 244.

McReynolds, T. C., State supervision of public utilities, 60, 151, 161.

Madison, Wisconsin, 108, 265, 363.

Madrid, Spain, 126.

Magrini, Effren, Milan street railways, 125, 377.

Magruder, F. A., Recent administration in Virginia, 99, 168.

Maguire and Mooney, Compensation for condemnation of property, 248.

Mahin, F. W., Nottingham municipal tramway, 120, 373.

Maltbie, M. R., Analysis of the rapid transit contracts between New York and the Interborough, 84, 139; Century of franchise history, 84, 139; Commissions and the courts, 193; Distribution of functions between local and state regulation, 176; Franchises of electrical corporations in New York, 140; Fruits of public regulation in New York, 80, 165, 186; Gas lighting in Great Britain, 120, 373; General history and legislation: British electricity supply works, 120, 373, British gas works, 121, 173; British tramways, 121, 173; Glasgow's municipal tramways, 121, 373; Judicial review of regulation, 193; Municipal functions, 25; Municipal and private management in Great Britain, 121, 373; Municipal ownership, 314; Proper treatment of appreciation of land, 233; Public service commissions, 40, 151, 156, 176; Public service corporations, 14; A rapid transit policy for Greater New York, 84, 140, 166; Report on the indeterminate franchise, 25, 132, 145; Street railways of Chicago, 57; A tale of two cities: water supply in London and Philadelphia, 121, 323, 358; Taxation of gas, electric supply and tramway undertakings in Great Britain, 121, 304; Taxation of public service corporations, 304; Valuation and future of public utilities, 207.

Manchester, England, 120, 373, 375.

Market value, *see* Valuation, theories and methods.

Marks, W. D., Capitalization, assets, and profits of Massachusetts gas companies, 67; Cost of electricity, 67, 260, 279; Depreciation, 244; Franchise value, 232; Law of demand for electricity, 71, 261; London sliding scale, 298; Practical rate making and appraisement, 198, 220; Price of electricity, 67, 260, 279; Quantity rates for electricity, 84, 263; Recapitulation of report on gas rates for Spokane, 101, 264; Recapitulation of report upon the fair price of magnetite arc lights, 75, 262.

Marston, A., Valuation for city purchase of the Waterloo waterworks, 62, 212, 350.

Marston, Glenn, Electric rates in Seattle, 100, 361; Facts on municipal ownership in 268 towns, 40, 341; Failure of municipal plants at Eugene, 93, 358; Fallacies of municipal ownership, 40, 331, 341; Gas rates and politics in

Chicago, 57, 259; Guarding against municipal plant agitation, 331; Holyoke's municipal lighting finances, 70, 352; Municipal electric competition, Burlington, 99, 360; Municipal ownership in Burlington, 99, 361; Municipal ownership in England, 121, 374; Poor service causes municipal ownership, 331; Seattle municipal electric plant, 100, 361; Spokane waterworks heavy loser, 101, 362; 200 municipal ownership failures, 40, 341; Vermont public utilities bill, 98, 168.

Martin, John, Business thrift in American and European cities, 25, 323, 336.

Martin, T. C., Electric lighting, 14; Electric railroads, 40; Municipal ownership always a failure, 331.

Marwick, Mitchell & Co., Financial matters: United States electricity works, 40, 342, United States waterworks, 41, 342.

Maryland, 64, 260.

Mason, H. G., *see* Ivins, W. M.

Massachusetts, 65 ff., 137, 138, 162, 163, 260, 261, 351, 352.

Massachusetts Legislature, London sliding scale of prices and dividends, 121, 298.

Mateer, R. B., Municipal ownership, 314, 323.

Mathews, G. C., Wisconsin water rates, 105, 171, 265, 291.

Mathewson, C. F., Holding companies and the public welfare, 308; Some legal aspects of regulation, 14.

Matthews, Nathan, Administrative provisions, 314; Municipal charters, 7; Relations with public service corporations, 129; Report on the London sliding scale, 122, 298.

Matthews, Nathan, Jr., and Thompson, W. G., Public service company rates and the fourteenth amendment, 193.

Maury, D. H., Engineering matters: United States waterworks, 41, 342; Rates for water service, 291.

Mawdesley, R. T., Municipal electricity supply at Johannesburg, 122, 374.

May, G. O., Problems of depreciation, 244.

May, M. B., Cincinnati, 88.

Mayer, Joseph, Just value of monopolies and the regulation of their prices, 295.

Mayfield, A. U., Public services of Denver, 51.

Mayo, E. W., Omaha's experience, 78, 354.

Mayors, American, conference of, 4.

Mead, D. W., Arbitration or appraisal, 207; Cost of furnishing water with reference to rates, 57, 259, 348.

Mead, E. S., Financial aspects of corporation franchises, 129; Holding companies, 308; Public service commission and the investor, 80, 165, 191; State supervision of security issues, 191.

Medicine Hat, Canada, 111, 364.

Meigs, R. J., Cooperation in making inventories, 222.

Melling, H. T., Operating costs for municipal gas-engine plant, 112, 365.

Merriam, C. E., Case for home rule, 176.

Metcalf, Leonard, Depreciation in waterworks operation, 244, 291; Lessening cost of valuation, 219; Private fire protection service charges, 41, 257, 292; Public utility commissions should regulate, not operate, 151; Waterworks valuation and fair rates, 18, 207, 252.

Metcalf, Leonard, and Alvord, J. W., Going value of waterworks, 229.

Metcalf, Leonard, Kuichling, E., and Hawley, W. C., Some considerations in the determination of a reasonable return for fire hydrant service, 41, 257, 292.

Meter rates, *see* Rate schedules.

Metz, H. A., Why municipal service is expensive, 314.

Meyer, B. H., Advantages of a state commission, 151, 176; Central utilities commission and home rule, 14, 176; State supervision of electric railways in Wisconsin, 105, 171, 186; What the Wisconsin commission has done, 105, 172; Wisconsin public utilities commission, 105, 172; Wisconsin public utilities law, 105, 172.

Meyer, H. R., Great Britain's lesson, 122, 331, 374; Municipal ownership in Germany, 114, 376; Municipal ownership in Great Britain, 122, 374.

Meyers, Alvin, Eugene municipal light and water plant, 93, 263, 358.

Michaelis, G. V. S., Is municipal ownership a dream? 314.

Michigan, 72, 73, 74, 138, 212, 261, 352, 353, 354.

Milan, Italy, 125, 377.

Miller, A. S., Gas rates, 285; Public service commission, 14; Regulation and utility financing, 295.

Miller, C. B., Taxation of railroad property, 304.

Miller, E. T., Texas stock and bond law, 101.

Miller, H. C., Applying efficiency standards in central station accounting, 182.

Miller, J. T., Fire protection: what is the proper basis for charges, 292.

Miller, T. D., Flat rate nuisance, 285.

Miller, W. E., Ashland water rate decision explained, 106, 172, 265, 295; Charges for public water service to private fire protection systems, 109, 265; Individuality of public utilities, 106.

Millis, H. A., Present street railway situation in Chicago, 58, 136.

Milwaukee Gas Light Company, Prices charged for gas in various cities, 41, 257.

Milwaukee, Wisconsin, 108, 109, 144, 265, 363.

Minimum rates, *see* Rate schedules.

Minneapolis, Minnesota, 75, 138, 262.

Minnesota, 74, 75, 76, 138, 163, 262, 354.

Minnesota Home Rule League, Regulation of public utilities in Wisconsin, 106, 172.

Minshall, T. H., London's electrical future, 122, 374.

Missouri, 76, 77, 139, 163, 213, 262, 354.

Mohler, C. K., Public utility regulation by Los Angeles, 48, 150.

Monroe, R. G., City of New York, 84; Gas, electric light, water and street railway services in New York City, 85.

Montgomery, H. E., Government ownership unnecessary, 14, 304.

Montony, L. G., Ninety-sixth street power station of the Metropolitan street railway company, 85.

Moody's Magazine, Municipal ownership and operation: symposium, 315.

Mooney, *see* Maguire.

Moore, Charles, Electric lighting in Detroit, 41, 73, 261.

Moore, C. E., Experience with a municipal gas plant, 50, 315, 345.

Moore, L. E., Cambridge subway, 69.

Morgan, P. W., Municipal water and light plant of Kansas City, 63, 350.

Morgan, W. O., Indeterminate permit as a satisfactory franchise, 106, 144, 145.

Morgan, W. S., *see* Pollock, H. M.

Morse, J. D., Valuation by approximation, 222.

Mortimer, J. D., Is regulation by commission a permanent part of our economic scheme? 14; Rate of return necessary to attract capital, 296; Rate of return on railway capital, 296; Risk as an element of the rate of return, 296; Wisconsin indeterminate permit law, 106, 144, 145.

Mott, Basil, and Hay, David, Underground railways in Great Britain, 122.

Mullhall, J. F. J., Experiences on the examination of waterworks accounts, 182; Quasi-public corporation accounting and management, 182; Waterworks accounting, 182.

Munagle, F. J., Kansas City settlement, 76, 139.

Municipal Engineering, Arguments on municipal ownership, 19.

Municipal Index, 19.

Municipal Ownership, 309 ff.

General works: books, 309; articles, 311; In favor, 319; Opposed, 326.

History: United States and foreign, 333; United States — general, 337; Alabama, 343; California, 343; Connecticut, 345; Florida, 345; Georgia, 346; Idaho, 346; Illinois, 346; Indiana, 349; Iowa, 349; Kansas, 350; Kentucky, 350; Louisiana, 350; Massachusetts, 351; Michigan, 352; Minnesota, 354; Missouri, 354; Nebraska, 354; New York, 355; Ohio, 356; Oklahoma, 358; Oregon, 358; Pennsylvania, 358; South Dakota, 360; Tennessee, 360; Texas, 360; Vermont, 360; Virginia, 361; Washington, 361; West Virginia, 362; Wisconsin, 362; Austria, 363; Belgium, 363; Canada, 363; France, 365; Germany, 366; Great Britain, 367; Italy, 377; Japan, 377; Sweden, 377; Switzerland, 377.

Regulation of municipal plants, 378.

Municipal plants, regulation of, 378.

Munro, W. B., Bibliography of municipal government, 19.

Munson, C. LaR., Pennsylvania public service law, 93, 167; Public service company law of Pennsylvania, 93, 167.

Murphy, J. J., Franchise grants in New York City.

Myers, G. L., Personnel of public service commissions, 151.

Myers, Gustavus, History of public franchises in New York City, 85, 140.

Nash, L. R., Cleveland railway situation, 90, 142; Commission regulation of business, 14; Demand electric rates as affected by commission regulation, 280; Depreciation reserves as affected by property growth, 244; Development of commission regulation, 41, 157; Financial problems of electric railways, 289; Recent developments in regulation, 229; Some commercial consideration in rate making, 280; Valuation of public service properties, 207.

Nashville, Tennessee, 97, 360.

National Association of Railway Commissioners, References on valuation, 19.

National Civic Federation, Commission regulation of public utilities, 41, 157; Draft bill for the regulation of public utilities, 42, 151, 157; Municipal and private operation of public utilities, 310; Shall the Government own and operate the railroads, the telegraph and telephone systems? Affirmative side, 323, Negative side, 331.

National Electric Light Association, Standard classification of accounts, 182.

National Municipal Review, 19.

Nau, C. H., Uniform systems of accounts for public utilities, 182.

Neal, J. H., Where maintenance ends and depreciation begins, 182, 244.

Neale, R. E., Depreciation in engineering works, 245.

Nebraska, 77, 78, 213, 354.

Neeley, F. H., Depreciation of power plant equipment, 245.

Nethercut, E. S., Valuation of operating properties, 208.

Newark, Ohio, 92, 358.

Newbigging, William, Kalamazoo situation, 74.

Newbigging, William, and Klumpp, J. B., Engineering matters: British gas works, 122, 374.

Newcomb, H. T., Cleveland's street railway problems, 90, 357; Constitutionality of the delegations in the interstate commerce law, 193; Force and effect of the orders of the interstate commerce commission, 193; Government regulation of railway capitalization, 191.

New Jersey, 78, 163, 213.

New Orleans, Louisiana, 63, 64, 260, 351.

New York, 78 ff., 139, 140, 141, 163 ff., 213, 263, 355, 356.

New York, New York, 83 ff., 139, 140, 141, 163 ff., 213, 263, 355, 356.

New York Public Library, Municipal reference notes, 19.

New Zealand, *see* Great Britain.

Nicholas, Frederic, Tendencies in central station rate making, 280.

Nichols, H. P., Progress in methods of granting franchises in New York City, 140.

Non-physical values, *see* Intangibles.

Norman, O. E., Factors involved in establishing service, charge and rate of return, 14.

Norsa, Renzo, Diversity factor and fixed charges, 280.

North Brookfield, Massachusetts, 70, 352.

Norton, W. J., Approval of demand rates by commissions, 42, 157, 280; Effects of the indeterminate franchise, 42, 145, 157; Form of electric rates, 280; Illinois commission law and municipal ownership law, 54, 160, 347; State regulation, 42, 151, 157; Two epochs of rate regulation, 151. *See also* Cory, C. L.

Norwich, Connecticut, 51, 345.

Nottingham, England, 120, 373.

Nourse, H. O., Water rates, 292.

Nutting, H. G. D., Accounting system for small central stations, 183; Depreciation, 245; Is regulation failing? 42, 152, 157.

O'Brien, T. D., Land values under the Minnesota rate case, 233, 253.

Obsolescence, *see* Depreciation.

Ohio, 87 ff., 141, 142, 143, 167, 213, 263, 356, 357, 358.

Oklahoma, 93, 167, 358.

Omaha, Nebraska, 77, 78, 354.

Ontario, Canada, 110, 266, 363, 364.

Opelousas, Louisiana, 64, 351.

Oregon, 93, 214, 263, 358.

Original cost, *see* Valuation, theories and methods.

Osaka, Japan, 126, 377.

Osborne, R. S., Public service: its legal history, 26.

Osborne, T. M., New York public service commission, 81, 165; Public service commission law of New York, 81, 165; Public utility law of New York, 81, 165.

Ossoski, Sidney, Basis of valuation in case of municipal purchase, 58, 90, 212, 213; Chicago plan of street railway supervision, 58, 136.

Ost, P. J., Municipal railways of San Francisco, 50, 344.

Overhead costs, *see* Intangibles.

Owen, Mark, Public ownership and increase of taxation in Great Britain, 122, 374; Why municipal ownership cannot be financially profitable, 331.

Paine, F. B. H., Preliminary and indirect costs, 229.

Palmer, Ray, Municipal lighting rates, 58, 259, 280; Street lighting rates and cost factors, 58, 259, 280.

Palo Alto, California, 48, 343.

Paris, France, 112, 113, 144, 365.

Parker, A. M., First municipal street railway in America, 100, 362.

Parker, F. W., Municipal ownership and graft, 324.

Parsons, Frank, British tramways, 123, 375; British tramway history, 123, 375; City ownership and operation of street railways, 324; Glasgow's great record, 123, 375; Legal aspects of monopoly, 15, 315; Mr. McKerrow's argument against municipal ownership, 123, 375; Municipal operation vs. private operation, 315; Public interest demands public ownership, 324; Public ownership, 42, 324; Public ownership and low rates, 324.

Parsons, Frank, and Roberts, F. H. H., Municipal ownership debated, 324, 331.

Parsons, W. B., Underground railways in the United States, 42.

Pasadena, California, 49, 258, 344.

Patterson, A. R., Organization of the accounting department of an electric railway and light company, 183.

Patton, James, *see* Bell, Sir James.

Patton, W. A., At what rate can water be profitably sold, 42, 258, 292.

Paxton, E. T., Public service rates in Texas cities, 98, 264.

Pearson, George, Municipal trading, 123, 315, 375.

Pence, W. D., Certain provisions of the public utilities law of Wisconsin, 173; Functions of a technical staff in regulation, 106, 172, 186, 214, 215, 222; Methods of regulating public utilities, 173; Some features of state regulation, 173; Valuation and inspection work of the Wisconsin tax and railroad commissions, 106, 172, 187, 215, 223; Valuation by Wisconsin state engineers, 107, 173, 215, 223; Wisconsin service inspection and improvement, 107, 173, 187, 223; Work of the joint engineering staff of the Wisconsin tax and railroad commissions, 107, 173, 187, 215, 223.

Pennsylvania, 93 ff., 143, 167, 168, 263, 358, 359, 360.

Peoria, Illinois, 59, 348.

Perkins, F. C., Municipal electric railways at Wellington, 123, 375.

Permit, indeterminate, *see* Length of term, franchise.

Perrine, F. A. C., Validity of electric light comparisons, 316.

Perry, F. B., Method for determining rates and prices for electric power, 280.

Perry, H. S., City that sold its waterworks, 59, 348.

Peters, J. W. S., Kansas City franchise fight, 76, 139; Suggested sliding scale of dividends for street railways, 129, 299. *See also* Wilcox, D. F.

Peters, J. W. S., and Wilcox, D. F., Outline of a model street railway franchise, 129.

Pfeiffer, A. J. J., Tramway depreciation, 245.

Phelps, C. E., Jr., *see* Stebbins, Theodore.

Phelps, L. F., Municipal lighting plant operated by oil engine, 82, 355.

Philadelphia, Pennsylvania, 94, 95, 96, 143, 263, 358, 359, 360.

Physical valuation, *see* Valuation.

Pierce, A. L., Municipal lighting in Wallingford, 51, 345.

Pigou, A. C., *see* Taussig, F. W.

Pike, C. W., Service standards prescribed by commissions, 43, 157, 187.

Pillsbury, C. L., Making and maintenance of priced inventories, 223.

Pinanski, A. E., Street railway system of metropolitan Boston, 69, 138.

Pittsburgh, Pennsylvania, 96.

Platteville, Wisconsin, 100, 265.

Plattner, William, Spencer's modern street lighting contract, 71, 261.

Plehn, C. C., Suggestion for a measure of the burden of taxation on street railways, 304; Taxation of franchises in California, 47, 134, 304; Taxation of public service corporations, 304.

Polakov, W. N., Cost of electricity, 280.

Pollock, H. M., Public service commissions of the state of New York, 81, 152, 165.

Pollock, H. M., and Morgan, W. S., Control of municipal public service corporations, 15, 375.

Pomerene, W. R., Observations on tramways in Great Britain, 375.

Pomeroy, L. R., Depreciation or valuation of properties, 245.

Pond, O. L., Methods of judicial review, 193; Taxation of corporations, 305.

Pool, L. A., Municipal lighting plant of Troy, 92, 358.

Pope, Herbert, Municipal contracts and regulation of rates, 130, 194.

Porter, R. P., Dangers of municipal ownership, 123, 332, 375; Dangers of municipal trading, 123, 332, 375; European and American methods and results compared, 26, 332, 376; Failure of municipal ownership in England, 123, 376; Municipal trading, 26, 332, 336.

Post, L. F., Political principle of public ownership, 316.

Potter, Alexander, Important water-works rate and appraisal investigation, 98, 214; Obligation of the state to the municipality, 177.

Potts, A. F., Successful substitute for municipal ownership, 324.

Potts, C. S., Texas stock and bond law, 98, 101.

Powell, F. W., Two experiments in public ownership of steam railroads, 70, 87, 352, 356.

Power rates, *see* Electric rates.

Powers, L. G., Governmental regulation of accounting procedure, 183.

Present value, *see* Valuation, theories and methods.

Priest, G. H., Some notes on the valuation of mains and services, 223.

Priestly, C. H., Municipal ownership of water undertakings, 324.

Pritchard, C. F., *see* Adams, A. D.

Prosser, R. W., Depreciation in gas plants, 245.

Prouty, C. A., Court protection unsafe, 152, 194; Meaning of the constitutional protection in valuation, 194, 253.

Providence, Rhode Island, 97.

Public Service Commissions, 147 ff.

- General works, 147:
- History: commissions in general, 153; California, 158; Colorado, 160; Illinois, 160; Indiana, 161; Iowa, 161; Massachusetts, 162; Minnesota, 163; Missouri, 163; New Jersey, 163; New York, 163; Ohio, 167; Oklahoma, 167; Pennsylvania, 167; Texas, 168; Vermont, 168; Virginia, 168; Washington, 168; West Virginia, 168; Wisconsin, 169.
- State *vs.* local regulation, 174; Uniform form accounting, 178; Service regulation, 184; Control of capitalization, 189.
- Judicial review of regulation: general works, 192, history, 194.

Public Service Publishing Company, Complete reports on municipally owned plants in Ohio, 87, 356.

Purchase, Value for, *see* Condemnation and purchase.

Qualifications of commissioners, *see* Public service commissions: General works.

Quebec, Canada, 110, 144.

Quitman, Georgia, 53, 346.

Radcliff, C. A., Public utility act of Ohio, 87, 167.

Railroad commissions, *see* Public service commissions.

Randolph, C. F., Municipal ownership of public utilities, 316.

Randolph, L. S., Ethics of allowance for depreciation, 245, 270.

Rate level, *see* Rate schedules.

Rate of return, 293 ff.

Rate Research, 270.

Rates, 255 ff.

- History: United States and foreign, 255; United States—general, 255; California, 258; Georgia, 259; Idaho, 259; Illinois, 259; Iowa, 260; Louisiana, 260; Maryland, 260; Massachusetts, 260; Michigan, 261; Minnesota, 262; Missouri, 262; New York, 262; Ohio, 263; Oregon, 263; Pennsylvania, 263; Texas, 264; Vermont, 264; Washington, 264; Wisconsin, 264; Canada, 266; France, 266; Germany, 266; Great Britain, 266; Italy, 267.
- Rate schedules: General works, 267, electric, 271, gas, 284, traction, 286, water, 290.
- Rate of return, 293; The sliding scale, 297.

Rate schedules, 267 ff.

- General works, 267; electric, 271, gas, 284; traction, 286; water, 290.

Rate theories, *see* Rate schedules.

Raymond, W. G., Rate making for public utilities, 270; Suggestions for rate making, 270.

Reader's Guide to Periodical Literature, 19.

Reed, W. E., Cost of arc lighting, 281.

Regina, Canada, 111, 364.

Regulation, history of, *see* History of public utilities and of regulation.

Regulation of municipal plants, 378.

Reid, C. S., Theories of electric current rate schedules, 281.

Renner, C. J., Experience with water meters and water rates, 99, 264, 361.

Reproduction cost, *see* Valuation, theories and methods.

Return, rate of, 293 ff.

Rex, Frederick, Chicago, 58.

Reynolds, J. B., Civic bibliography for greater New York, 19.

Rhode Island, 97.

Rice, Frederick, Jr., Are public service charges too low? 270.

Richards, J. L., Boston consolidated gas company, 69, 261; History of the gas industry of Boston, 69.

Richards, R. H., Tacoma's Nisqually River development, 101, 362.

Richards, W. H., Meter rates, 292.  
 Richardson, A. C., Buffalo, 82.  
 Richey, A. S., Cost of rush-hour service, 289.  
 Richmond, Virginia, 99, 361.  
 Rickards, A. E., Purchased power, 270.  
 Rider, J. H., Charges for supply from combined lighting and traction stations, 123, 267, 281, 289.  
 Rifenberick, R. B., Something along the line of physical and intangible valuation, 208, 245.  
 Riggs, H. E., Valuation of public service corporation property, 43, 208, 211, 223.  
 Ringe, H. R., Philadelphia, 95.  
 Rinkliff, G. L., Springfield's street railway franchise, 92, 143.  
 Ripley, W. Z., Capitalization of public service corporations, 67, 191; Determination of reasonable rates, 195; Investor's interest in valuations, 208; Physical valuation of railroads, 43, 208, 211; Physical valuation: reasonable rates, 43, 208, 211; Public regulation of railroad issues, 191; State regulation of security issues, 191.  
 Riverside, California, 49, 344.  
 Robb, Russell, A problem in the making of rates, 245.  
 Robbins, Hayes, Philadelphia and its gas works, 95, 359; Public ownership *vs.* public control, 26, 336.  
 Roberts, F. H. H., *see* Parsons, Frank.  
 Roberts, J. L., Charges for electrical energy, 281.  
 Roberts, W. H., An auxiliary hydro-power plant, 88.  
 Robinson, Clifton, Tramways of the world, 26.  
 Robinson, M. H., The public utilities commission, 54, 160.  
 Robinson, S. C., What would be a proper charge under these conditions? 112, 266.  
 Robson, H. A., Municipal utilities' accounting, 183.  
 Rochester, New York, 86, 356.  
 Roemer, J. H., Causes and effects of a commission, 107, 187; Certain important provisions of the public utilities law of Wisconsin, 107, 152; Commission control of public utilities, 15; Methods of regulating utilities, 107; Municipal regulation of utilities, 177; Regulation of public utilities, 15; Some features of state regulation, 7, 107; Utility home rule, 177.  
 Rogers, J. I., Municipal gas in Philadelphia, 95, 359.  
 Rogers, W. O., Danville municipal lighting, 99, 361.  
 Rosa, E. B., Function of research in regulation, 187; Government's part in regulation, 187; Legal specifications for illuminating gas, 187; Research in the regulation of natural monopolies, 188.  
 Rosa, E. B., and McBride, R. S., Standards for gas service, 188.  
 Rosamond, S. J., What would be a fair basis for fixing water rates, 43, 258, 292.  
 Rosecrantz, C. M., Other elements of value, 229, 248, 253; Some limitations and objections to municipal ownership, 332.  
 Rosewater, Victor, The case for municipal ownership of electric lighting, 325; Municipal ownership of electric lighting, 43, 342.  
 Ross, J. D., Municipal lighting plant at Seattle, 100, 362; Seattle municipal light and power plant, 100, 264, 362.  
 Rowle, L. S., Fundamental principles involved in municipal ownership, 316; Municipality and the gas supply, 95, 359; Municipal ownership and operation: the value of foreign experience, 114, 316, 325, 367; Possibilities and limitations of municipal control, 152, 305; Problems of city government, 7; Relation of the city to public utilities, 15, 26, 130, 146, 336.  
 Royce, F. P., The business of local public service companies, 15; Commission control of public service corporations, 15; Going concern value in public service corporations, 230; Present day regulation, 15; Valuation: a fair return and reasonable capitalization, 208.  
 Royse, C. A., Will public ownership increase or diminish political corruption, 124, 325, 376.  
 Royse, Daniel, Depreciation in electric railway accounting, 245.  
 Russell, S. A., Electric power supply tariffs, 281.  
 Ryan, W. T., Systems of charging for electrical energy, 281.  
 St. Albans, Vermont, 99, 264, 361.  
 St. Louis, Missouri, 77, 163, 262, 354.  
 St. Paul, Minnesota, 76, 262.  
 Saliers, E. A., Caring for depreciation, 254; Depreciation in theory and practice, 245; Depreciation in valuations, 246; Principles of depreciation, 246.

Salmon, C. B., Wisconsin public utility law, 107, 173.  
 San Antonio, Texas, 98, 214.  
 San Francisco, California, 49, 50, 134, 212, 344, 345.  
 Santa Clara, California, 50, 345.  
 Sara, R. A., Another municipal plant supplying current at three cents, 112, 266, 365.  
 Saskatoon, Canada, 111, 364.  
 Schaff, Morris, Capitalization of earnings, 191.  
 Schaff, M. R., Low rates to large users, 281. *See also* Knowles, Morris.  
 Schedules, rate, *see* Rate schedules.  
 Scholefield, J. B., Engineering and accounting, 183.  
 Schrieber, Martin, The accuracy of appraisals, 223.  
 Schussler, Hermann, San Francisco's water supply, 50.  
 Scobell, E. C., Variations in public service systems of accounting, 43, 157, 183.  
 Scotland, *see* Great Britain.  
 Scovell, C. H., Report on the commissions in Massachusetts, 67, 162.  
 Seabrook, A. H., An English central station rate system, 124, 267, 281.  
 Seabury, Samuel, Municipal ownership and operation in New York City, 85, 355.  
 Sealy, Robert, Accounting treatment of depreciation, 246.  
 Seattle, Washington, 100, 264, 361, 362.  
 Securities issues, regulation of, *see* Capitalization, control of.  
 Seely, C. T., Collection of fares under a zone system, 289.  
 Seligman, E. R. A., Taxation of franchise values, 305.  
 Sells, E. W., Corporate management compared with government control, 332.  
 Semenza, Guido, Methods of charging for electric motive power, 126, 267, 281.  
 Seng, A. W., Selling water at a profit, 63, 350.  
 Service inspection, *see* Service regulation.  
 Service regulation, 184 ff.  
 Shaad, G. C., Determination of depreciation, 246; Intangible values and their relation to valuation, 230.  
 Sharfman, I. L., Commission regulation of public utilities, 43, 158; Problem of regulation, 16; Railway regulation, 8; Regulation by the States, 44, 158; Regulation of railway rates, 195, 208, 253.  
 Sharp, E. E., Equity *vs.* expediency, 281.  
 Shaw, G. B., The common sense of municipal trading, 325.  
 Shaw, W. A., Development and importance of an engineering department, 188.  
 Shawfield, C. E. C., Cheap power supply by municipalities, 282.  
 Sheffield, England, 117, 120, 370, 373.  
 Sheldon, P. H., Controversy over electric rates in Houston, 98, 264.  
 Shepard, E. M., City owning and leasing, 316, 325.  
 Shepardson, G. D., Why some municipal electric plants do not pay better, 316.  
 Sherman, S. A., Providence, 97.  
 Shibley, G. H., Referendum and initiative in relation to municipal ownership, 317, 325.  
 Shields, R. H., Railroad taxation problems, 71, 305; Taxation of corporate property of Michigan railroads, 71, 305.  
 Shortt, Adam, Taxation of public service corporations, 305.  
 Shuster, T. W., Rates and methods of charging, 282.  
 Sidlo, T. L., Cleveland invalidity clause, 90, 142; Consolidation of public utilities in Ohio, 88.  
 Siefer, C. A., Uniform classification, 108, 174, 183.  
 Sikes, G. C., Chicago's struggle for freedom from traction rule, 58, 136; Question of franchises, 146; Relation of Chicago to public service corporations, 58.  
 Silcock, E. J., Valuation of waterworks undertakings, 200, 248.  
 Simmons, F. G., Private *vs.* municipal ownership, 332.  
 Simpson, J., Municipal powers re-lighting plants, 317.  
 Sinclair, Alexander, Load factor, 282.  
 Sines, H. S., Effect of central station rates on new business, 282.  
 Sinsheimer, P. A., Regulation of securities, 192; Ten rules for service, 16, 47, 159, 188.  
 Skip-stop, *see* Service regulation.  
 Slavin, Matthew, Municipal electricity in Pasadena, 49, 344.  
 Sliding Scale, 118, 121, 122, 125, 297, 298, 299.  
 Sloan, H. M., Municipal ownership and operation of street railways, 332.  
 Smalley, H. S., Railroad rate control, 194.  
 Smith, C. A., Depreciation and sinking fund, 246.

Smith, E. B., Street railway legislation in Illinois, 54.

Smith, J. A., Effect of state regulation upon municipal home rule, 177, 378; Municipal vs. state control, 100, 168, 177; Seattle, 100.

Smith, J. E., Experiments at Springfield, 59, 348.

Smithson, R. A., Municipal operation of tramways, 124, 376.

Smucker, L. L., Topeka's unsuccessful lighting plant, 63, 350.

Snell, J. F. C., Cost of electrical power for industrial purposes, 282.

Snider, G. E., Taxation of the gross receipts of railways in Wisconsin, 108, 305.

Sorenge, E. M., Cost figures for Brookings, 97, 360.

South Norwalk, Connecticut, 51, 345.

Spain, 126.

Special Libraries, 19.

Speirs, F. W., Philadelphia gas lease, 95, 359; Regulation of cost and quality of service, 16; Street railway system of Philadelphia, 96, 359.

Spencer, A. W., Prevention of stock watering, 44, 192; Should public franchises be treated as corporate property? 130.

Spencer, C. J., Determination of central station rates, 282.

Spencer, Massachusetts, 71, 261.

Sphohrer, H. H., Electric rates, 77, 262, 282.

Spokane, Washington, 101, 264, 362.

Sprague, F. J., Growth of electric railways, 26.

Springborn, W. J., Municipal electric lighting plants for Cleveland, 91, 357; Municipal ownership of water plants, 91, 357.

Springfield, Illinois, 59, 348.

Springfield, Ohio, 92, 143.

Staley, D. H., Colorado in litigation, 51, 160.

Standrod, D. W., A utility commissioner's view of municipal ownership, 332.

State vs. local regulation, 174 ff.

Stearns, F. P., Depreciation defined, 246.

Stearns, R. B., Milwaukee fare case, 265; Zone system of fares in practice, 109, 265, 289.

Stebbins, Theodore, Interurban railway fares, 280.

Stebbins, Theodore, and Phelps, C. E., Jr., Engineering matters: U. S. electricity works, 44, 342.

Step rates, *see* Rate schedules.

Strettell, J. E., Comparative yield on trade and public service investment, 296.

Stevens, F. E., Cleveland, 91.

Stevens, F. W., Accounting in public service regulation, 183; Discussion of principles in valuing land, 234; Mooted principles in valuation, 209, 253; Valuation of right of way, 234.

Stockholm, Sweden, 126, 377.

Stone & Webster Library, Current literature references, 20.

Storer, S. B., Relation of load factor to valuation of hydroelectric plants, 230; Sale and measurement of electric power, 282.

Stowe, L. B., Public service companies and the people, 81, 165.

Strait, E. N., Wisconsin commission method of rate making, 108, 174, 270.

Stratton, I. W., State and local regulation in Pennsylvania, 94, 167, 177.

Street car fares, *see* Fares, street car.

Sullivan, J. W., City transit systems, 332; The labor report, 26, 337; Municipal and private operation of public utilities, 27, 337; Municipalization or a just regulation, 333. *See also* Commons, J. R.

Sullivan, J. W., and Commons, J. R., Labor and politics: U. S. Waterworks, 44, 342.

Sutton, W. E., Ownership in a small community, 61, 349.

Sweden, 126, 377.

Switzerland, 126, 377.

Swoboda, H. V., An analysis of electric cooking, 282.

Sylvan Grove, Kansas, 63, 350.

Syracuse, New York, 87, 356.

Tacoma, Washington, 101, 362.

Tait, Fred, *see* Bowden, J. H.

Tarentum, Pennsylvania, 96, 360.

Taunton, Massachusetts, 71, 352.

Taussig, F. W., Contribution to the theory of railway rates, 270; Public ownership and public control, 16, 317; Railway rates and joint cost once more, 271.

Taussig, F. W., and Pigou, A. C., Railway rates and joint cost, 271.

Tawney, R. H., Municipal enterprise in Germany, 114, 367.

Taxation, 300 ff.

Taylor, A. M., Philadelphia's transit problem, 95; Solution of a city's transit problem, 96.

Taylor, Benjamin, Municipal Glasgow, 124, 376; Municipal ownership of

tramways in the United Kingdom, 124, 376.

Teichmann, Max, Depreciation, 246.

Tendencies in valuation, 249 ff.

Tener, J. K., Need for a public utilities bill in Pennsylvania, 94, 167.

Tennessee, 97, 360.

Term, length of, franchise, 144 ff.

Terrell, Texas, 98, 360.

Texas, 97, 98, 168, 214, 264, 360.

Thelen, Max, A California problem, 47, 159, 177; California's new law, 48, 159; Public utility regulation in California, 48, 159; Report on leading railroad and public service commissions, 44, 158.

Thomas, J. J., Depreciation and valuation, 200, 246.

Thomas, P. H., Rate making for public utilities, 253.

Thompson, C. D., Municipal ownership, 325.

Thompson, H. A., Galena's experience with ownership, 59, 348.

Thompson, R. A., Method used by the railroad commission of Texas in valuing railroads, 98, 192, 214, 223.

Thompson, W. G., *see* Matthews, Nathan, Jr.

Thorne, Clifford, Going value as an element of fair value, 230, 253.

Thurber, T. B., Some arguments against municipal ownership, 333.

Tiedeman, C. G., Government ownership of public utilities, 317.

Tighe, J. L., Municipal water supply revenue, 317; Water consumption, waste and meter rates, 70, 261.

Tingley, C. L. S., Present tendency of public utility laws and regulations, 44, 54, 158, 160.

Tingley, R. H., Overhead charges in valuation, 230.

Tokio, Japan, 126.

Toledo, Ohio, 92, 263.

Tolman, E. B., Chicago's traction question, 58, 136.

Tomkins, Calvin, Municipal ownership, a business problem, 317.

Topeka, Kansas, 63, 350.

Toppin, W. A., Present tendency of charging for electricity, 124, 267; Supply by meter or contract, 282; Systems of charging for electricity supply, 283.

Toronto, Canada, 110, 111, 112, 125, 266, 363, 365.

Towler, W. G., Socialism in local government, 124, 333, 376.

Traction fares, 286 ff.

Transvaal, 122, 374.

Trinkle, W. N., Public service company law of Pennsylvania, 94, 167.

Tripp, G. E., Taxes and licenses, 305.

Troy, New York, 87, 356.

Troy, Ohio, 92, 358.

Tsukamoto, C., Hydroelectric power from snow clad Fujiyama, 126.

Turner, E. H., *see* James, R. C.

Turner, E. H., and James, R. C., Financial matters: British gas works, 124, 376; British tramways, 124, 376.

Tweedy, E. F., Central stations' load factors, 283.

Tyng, L. H., Private *vs.* public operation of gas companies, 333.

Uniform accounting, *see* Accounting, uniform.

United Kingdom, *see* Great Britain.

United States, 28 ff., 132, 133, 134, 153 ff., 211, 212, 255 ff., 337 ff.

United States and foreign, 22 ff., 132, 255, 333 ff.

U. S. Bureau of the Census, Central light and power stations, 44, 45, 133; Street and electric railways, 27, 45, 133, 258, 305, 342.

U. S. Bureau of Standards, Standard methods of gas testing, 188; Standard regulations for manufactured gas, 45, 188; Standards for electric service, 45, 188; Standards for gas service, 45, 188; State and municipal regulations for illuminating gas, 45, 189.

U. S. Interstate Commerce Commission, Railways in the United States in 1902, 45, 158, 306.

U. S. Library of Congress, List of bibliographies on regulation, 20; List of books relating to railroads, 20; List of recent references on public service rates, 20; List of references on municipal ownership, 20; Monthly list of state publications, 20; Select list of books on municipal affairs, 20, on railroads in foreign countries, 20; Select list of references on municipal franchises, 20, on municipal ownership, 20, on public service commissions, 20, on public service rates, 21, on the valuation and capitalization of railroads, 21.

Utilities Magazine, Proceedings of the conference on valuation, 198.

Vail, T. N., Public utilities and public policy, 152; State control of public utility companies, 152; Wages subject for regulation, 152.

Valon, Arthur, The rating of water undertakings, 306.

Valuation, 196 ff.

- General works: books, 196, articles, 201.
- History: United States — general, 211; California, 212; Illinois, 212; Iowa, 212; Michigan, 212; Missouri, 213; Nebraska, 213; New Jersey, 213; New York, 213; Ohio, 213; Oregon, 214; Texas, 214; Washington, 214; Wisconsin, 214.
- Theories and methods, 215; Inventories, 220; Intangibles, 224; Franchise value, 231; Land value, 233; Depreciation, 234; Condemnation and purchase, 248; Court and commission attitude, 249.

Van Auken, C. L., Making a valuation of large terminals, 224.

Van Metre, T. W., *see* Johnson, E. R.

Vermont, 98, 99, 168, 264, 360, 361.

Vesey-Brown, C. S., Electric power tariffs, 283.

Vienna, Austria, 109, 363.

Vincent, W. G., Jr., Present value of public utility properties, 219. *See also* Cory, C. L.

Virginia, 99, 168, 361.

Vittinghoff, Hans von, Regulation of the service rendered by gas companies, 189.

Wade, H. T., National bureau of Standards and standards for public utilities, 189.

Wagner, B. M., Acquisition of private water plants by municipalities, 248, 317; Rates for water supply, 46, 209, 258, 292.

Wagner, H. A., Public service and the consumer, 16.

Walcott, E. A., Municipal railways of San Francisco, 50, 344.

Walker, H. B., Government furnishes cheap electricity, 53, 259, 346.

Walkerville, Canada, 111, 266.

Wallingford, Connecticut, 51, 345.

Wallis, L. R., The foresee system of charging, 283.

Wallis, R. N., Accounting of depreciation by electric railways, 246; Depreciation as applicable to electric railways, 246.

Waring, J. M. S., *see* Lloyd, E. W.

Warner, C. A., What is wrong with municipal ownership? 317.

Warner, G. E., Public ownership of lighting plant, 46, 86, 342, 356.

Warner, J. DeW., Should greater New York operate its street railways? 85, 325, 356.

Warren, B. W., The state and the street railway, 68, 163.

Washington, 99, 100, 101, 168, 214, 264, 361, 362.

Washington, D. C., 52.

Watered stock, *see* Capitalization, control of.

Waterloo, Iowa, 62, 212, 350.

Water rates, 290 ff.

Watkins, G. P., Electrical rates in the opinions of the Wisconsin commission, 108, 174, 265; Electrical rates: load factor and density factor, 283; Street railway rates, 290.

Watson, C. C., Nashville's deteriorated waterworks, 97, 360.

Webster, W. A., American principles in business and politics, 333.

Wellington, New Zealand, 123, 374.

Wells, W. I., Elements affecting fair valuation, 224.

West, Max, Franchises of greater New York, 85, 140; Municipal franchises in New York, 85, 140.

Western, R. W., Calculating depreciation, 246.

Weston, C. V., Street railway franchises, 130.

Weston, George, Supervising engineers and street railway service, 58, 189. *See also* Arnold, B. J.

West Virginia, 101, 168, 362.

Wetterer, C. F. W., Desirability of indeterminate instead of fixed term franchises, 146.

Wheeling, West Virginia, 101, 362.

Wherry, W. M., Jr., Four public utility laws analyzed, 54, 60, 94, 101, 161, 168; Franchise values, 232, 253.

Whinery, Samuel, Municipal ownership, 318; Quasi-public corporations and their control, 130, 146.

Whipple, F. H., Cost of public lighting, 46, 253, 343; Ownership of central stations, 46, 343.

Whitehorne, E. E., Value of the poor man's business, 46, 258, 283.

Whitfield, J. B., Public utility corporations in general, 16; Rights and duties of public service corporations, 16.

Whitney, E. B., Public ownership in New York, 86, 356.

Whitney, F. N., Centralized assessment of public utilities in New York, 81, 306.

Whitney, L. N., Present value misleading, 247.

Whitney, T. H., Coöperation between companies, commissions and public,

152; New York City public service commission, 81, 166; New York public utilities, 81, 166; Public service commissions act of New York, 81, 166.

Whitridge, F. W., Official valuations of private property, 209.

Whitten, R. H., Actual cost, 220; Average price *vs.* present price, 224; Bibliography of valuation and depreciation, 21; Boston sliding scale plan, 69; Certain principles of valuation, 209; Depreciation and regulation, 247; Distinction between value for tax and rate purposes, 220, 306; Fair value for rate purposes, 209; Paris subway system, 113, 144, 365; Public service commission situation in New York, 82; Rate of return, 296; Regulation of public service companies in Great Britain, 125, 299; Rules for appraisers in Maine condemnation cases, 224; Supervision of street railways in England and Prussia, 27; Taxation of corporations, 46, 306; Toronto auction sale and maximum dividend system, 112; Valuation of public service corporations, 199, 211, 220, 230, 232, 234, 247, 249, 254; Valuation of public utilities, 209; Work of the commission for the first district, New York, 81, 166.

Whittlesey, J. T., Success of municipal lighting plants in California, 48, 343.

Wilcox, D. F., Capitalization, capital, values, appraisals and purchase price, 210; Control of public service corporations in Detroit, 73, 138; Control of public utilities, 130, 146, 318; Crisis in public service regulation in New York, 82, 152, 166; Detroit, 73; Effects of state regulation upon municipal ownership movement, 46, 152, 158, 318; Elements of a constructive franchise policy, 86, 130, 140; Franchise provisions in commission charters, 130; Fundamental planks in a public utility program, 16, 306, 318; Grand Rapids, 74; How the Chicago and Cleveland street railway settlements are working out, 59, 91, 136, 142; How to make a study of local utility franchises, 131; Local utility departments, franchise bureaus and special experts, 177; Minneapolis gas settlement ordinances, 75, 138; Municipal franchises, 46, 69, 96, 131, 134, 299, 306, 359; Municipal home rule and franchises, 146, 177; Municipal ownership, 326; Needed changes in the public service laws of New York, 82, 166, 178; New York subway contracts, 86, 141; Principles as to franchise values, 232, 249, 306; Problems of transit in cities, 17; Public service commission situation in New York, 166; Public utility advice, 318; Regulation of municipal utilities, 140; Report upon proposed standard form of franchise, 86, 141; Street railway franchises in greater New York, 86, 141; Street railway resettlements, 46, 343; Street railway settlement franchises of Chicago and Cleveland, 59, 91, 136, 143; Supervision of local utilities by state commissions, 153; Taxation of public utilities, 307; What a street railway franchise should contain, 132. *See also* Peters, J. W. S.

Wilcox, D. F., and Peters, J. W. S., Suggestions for a model street railway franchise, 132.

Wilcox, N. T., Some reasons for difference in price, 271, 283; Wholesale rates for central station service, 283.

Wiles, C. W., Ownership of public utilities, 318.

Wilgus, W. J., Physical valuations of railroads, 210, 220.

Wilkie, J. E., Sidelights on London tramways, 125.

Willcox, O. B., Competition with other investments, 296; Returns necessary to attract new capital, 296; Methods of determining the economic productivity of municipal enterprises, 318.

Williams, A. D., Cleveland municipal electric plants, 357.

Williams, Arthur, Municipal ownership costly and dangerous, 27, 333, 337; Municipal ownership of public utilities, 27, 333, 337.

Williams, E. E., How London loses by municipal ownership, 125, 377.

Williams, F. H., Fort Wayne's municipal lighting plant, 60, 349.

Williams, Harrison, Assessment of railroads, 82, 307.

Williams, W. H., Railway capital and values, 71, 212; Valuation of public service corporations, 220.

Willis, H. E., Proper relation between public callings and the state, 17.

Wilmot, H. W., Depreciation, 247.

Wilson, Alexander, Presidential address: Institution of gas engineers, 125, 377.

Wilson, C. P., Financing public utilities under state control, 210, 296.

Wilson, H. W., Three-cent light in Cleveland, 91, 143, 357.

Wilson, Thomas, City and state power plants at Columbus, 92, 357; Detroit's municipal lighting plant, 73, 353; Kalamazoo municipal plant, 74, 353.

Winchester, A. E., South Norwalk's municipal electric works, 51, 318, 345. *See also* Klumpp, J. B.

Winnipeg, Canada, 110, 111, 112, 266, 364, 365.

Winslow, A. A., City ownership of street railways in Liège, 109, 363.

Winslow, W. H., A study of the conditions affecting the price at which capital can be secured, 296; What is fair return? 297.

Winslow, Willard, Boston's new subway, 70, 352.

Wisconsin, 102 ff., 143, 144, 169 ff., 214, 215, 264, 265, 362, 363.

Witt, Peter, Public favors skip-stop, 91, 189.

Wolff, Mark, Interpretation of waterworks accounts, 184.

Wolff, S. E., Rates for industrial purposes, 286.

Wolff, Solomon, Public service corporations of New Orleans, 64.

Wood, A. E., Labor problem of municipal utilities, 153.

Woodruff, C. R., Philadelphia gas works, 96, 360; Philadelphia street railway franchises, 96, 143; Recent street railway legislation in Pennsylvania, 94, 96, 360.

Woods, R. A., and Eastman, J. B., Boston franchise contest, 70, 138.

Woodward, J. H., *see* Crawford, N. McD.

Woodward, Park, Municipal ownership, 318.

Woolfolk, W. G., Appraisal of public utility properties, 200, 210, 224, 297.

Wootan, J. B., Kansas City m. o. light plant a failure, 63, 350; Richmond street lighting plant, 99, 361; Truth about Cleveland, 91, 357.

Worcester, Massachusetts, 71, 261.

Works, L. R., Board of public utilities of Los Angeles, 48, 159; State *vs.* municipal regulation, 178.

Worthington, Thomas, Regulation *vs.* municipal ownership, 52, 333, 346.

Wright, Arthur, Central station tariff system, 283; Some principles underlying the profitable sale of electricity, 284.

Wright demand rate, *see* Electric rates.

Wright, H. C., Development of transit control in New York City, 86, 141.

Wrightington, E. N., Sliding scale method of regulation, 70, 299.

Wrightington, S. R., Taxation of guaranteed stock in Massachusetts, 68, 192, 307.

Wyer, S. S., Depreciation, 247; Going value and going concern value, 230; Governmental power to regulate, 17; Natural gas valuation, 210; Principles governing cost, 271; Rate regulation of electric power, 17, 210; Reasonableness and legal right of the minimum charge, 258, 271; Regulation, valuation and depreciation, 8, 194, 200, 254; Valuation, 210.

Wyman, Bruce, Illegality as an excuse for refusal of public service, 189; Judicial limitations upon commission action, 194; State control of public utilities, 17, 27. *See also* Beale, J. H.

Yeaman, C. H., Depreciation and reserves for antiquation and obsolescence, 247.

Yellott, O. I., Notes on depreciation, 247.

Yerbury, H. E., Equitable charges for tramway supply, 125, 267, 290.

Young, A. A., Depreciation and rate control, 248.

Young, C. G., Logical basis for valuations of interurban street railways, 200, 210, 297.

Young, P. S., Accounting methods of a holding company, 154; Accounting of capital expenditures, 184.

Youngman, Anna, Frankfort-on-the-Main, 114, 367.

Y. M. C. A., New York, West Side Branch, Public utility economics, 9.

Ypsilanti, Michigan, 74, 354.

Zangerle, J. A., The larger view of municipal ownership, 326.

Zone fare system, *see* Fares, street car.

Zueblin, Charles, Municipal ownership, 326; Municipal railway regulation, 47, 50, 345.

Zurich, Switzerland, 126, 377.



PRINTED AT  
THE HARVARD UNIVERSITY PRESS  
CAMBRIDGE, MASS., U. S. A.











